

FEDERALISM
FEDERALISM
FEDERALISM

Christine von Arb
Willi Zimmermann

Federalism

A Characteristic Element of Swiss Forest Policy

Zurich 2004

ETH

Swiss Federal Institute of Technology Zurich
Chair of Forest Policy and Forest Economics
Institute for Human-Environment Systems
Department of Environment Sciences

www.fowi.ethz.ch/ppo

Interlaken Workshop on Decentralisation in Forestry 27 - 30 April 2004

Interlaken, Switzerland

**A contribution of Switzerland to the Country-led Initiative
in Support of UNFF on Decentralization,
Federal Systems in Forestry and National Forest Programmes**

prepared by Chair of Forest Policy and Forest Economics
 Institute for Human-Environment Systems
 Department of Environmental Sciences
 Swiss Federal Institute of Technology, ETH Zurich

commissioned by Swiss Agency for the Environment,
 Forests and Landscape, SAEFL
 Expert supervision: Christian Küchli, SAEFL
 www.umwelt-schweiz.ch/buwal/eng/info/buwal/

Edited by	Chair of Forest Policy and Forest Economics
ISSN	1420-1143
Designed by	wyssgrafik termen
Printed by	BON AG, CH-3904 Naters
Distributed by	Chair of Forest Policy and Forest Economics, ETH Zentrum, CH-8092 Zurich
and available from	Tel. ++41 1 632 32 17; Fax ++41 1 632 11 10 e-mail: susanne.schultheiss@env.ethz.ch
Download	http://www.fowi.ethz.ch/ppo

Table of Contents

Summary	5
1. Importance of Federalism Generally and in Current Discussion	8
2. Federalism as a General Structural Principle of Political Systems	9
2.1 <i>Conceptual Framework and Basic Features</i>	9
2.1.1 <i>Definition and Basic Features</i>	
2.1.2 <i>Types of Federalism</i>	
2.1.3 <i>Federalism and Decentralization</i>	
2.2 <i>Purpose, Advantages and Disadvantages of Federalism</i>	11
2.2.1 <i>Aims and Basic Tension</i>	
2.2.2 <i>Criticism and Conclusion Concerning Federalism in General</i>	
3. The Swiss Form of Cooperative Federalism	13
3.1 <i>Origin of the Federation</i>	13
3.2 <i>Bicameral Parliament, Plebiscites and Cantonal Competences</i>	14
3.3 <i>The Third Level: the Communes</i>	15
3.4 <i>Horizontal Federalism</i>	15
3.5 <i>Cooperative Federalism</i>	16
3.6 <i>Summarizing Assessment of Swiss Federalism</i>	16
4. Federalism in Swiss Forest Policy	18
4.1 <i>Early Centralism: Forests as a Resource</i>	18
4.1.1 <i>Usage Rights and Regulation by Communes</i>	
4.1.2 <i>Early Centralizing Tendencies Due to Wood Scarcity</i>	
4.1.3 <i>Property Rights and Liberalization</i>	
4.1.4 <i>Cantonal Forestry Laws</i>	
4.2 <i>Development of a Cooperative Federalist Forest Policy with a Tendency towards Centralism</i>	21
4.2.1 <i>The First Federal Competence Concerning Forests: Restricted to Mountains</i>	
4.2.2 <i>The First Federal Forestry Law: Financial Contributions and Implementation Success</i>	
4.2.3 <i>Expansion of the Federal Competence: a Step towards Centralization</i>	
4.3 <i>Federal Forest Policy in the 20th Century: Cooperation and Centralization</i>	24
4.3.1 <i>Federal Superintendence and the Cantons as Norm Addressees</i>	
4.3.2 <i>Organization, Professional Training and Forestry Community</i>	
4.3.3 <i>The Communes as Norm Addressees</i>	
4.3.4 <i>The Main Objective: Preservation of Forest Area</i>	
4.3.5 <i>Financial Contributions of the Federation and the Scope of the Federal Competence</i>	
4.3.6 <i>Other Constitutional Competences of the Federation Relevant for Forestry</i>	
4.3.7 <i>Summarizing Assessment of the Law of 1902 and Its Development</i>	
4.3.8 <i>The Forest Law of 1991</i>	
4.4 <i>Federalist Elements in Present Swiss Forest Policy</i>	31
4.4.1 <i>Federalist Institutions</i>	
4.4.2 <i>Federalist Contents</i>	
4.4.3 <i>Federalist Procedures</i>	
4.5 <i>Federalist Elements in the Swiss National Forest Programme (WAP)</i>	34
5. Conclusions and Outlook	37
Bibliography	40
Laws and Official Publications	44

Summary

Like the entire political system of Switzerland, Swiss forest policy is shaped to a high degree by the principle of federalism, meaning that a state – the federation – consists of several member states, and both the federation and the member states have a share in sovereignty. There are different types of federalism. The Swiss political system has all characteristics of federalism in general, like, for example, constitutionally guaranteed rights and competences of the cantons (member states) and a bicameral parliament. Special features of the Swiss type of federalism are the complementary (i.e. partly by the federation, partly by the cantons) fulfilment of public tasks (cooperative federalism) and the existence of a third level within the federation: Besides the federation and the cantons, there are the communes (municipalities). The communes have political institutions and competences of their own and are integrated into the federalist system. Originally, Switzerland was a loose confederation of small independent states, which in the 19th century was transformed, by the member states' yielding part of their sovereignty and competences to it, into a federation. Therefore – as the cantons did not receive their competences from the federation, but had them from the beginning – in connection with the Swiss political system, the term "non-centralization" is often preferred to "de-centralization".

The present political structure and division of competences among the federation, the cantons and the communes are the result of a long historical process that consisted mainly of a bottom-up development (i.e. from the communes to the cantons to the federation). This applies particularly to the distribution of public tasks and competences in the field of forest policy. In the beginning of this process, local regulation of forest usage was prevailing. When the system of forest usage rights was replaced by the concept of property and all forests were assigned to specific owners, the communes became the owners of the greatest part of the Swiss forests and thus the most important addressees of the – now cantonal – regulations concerning forestry. When in the middle of the 19th century the former confederation was transformed into a federation, a new actor came into existence, soon also claiming competences concerning forestry. Certain socio-economic developments and several natural disasters caused interventions of the federation in the field of forest policy already in the second half of the 19th century.

The institutional safeguards of federalism allowed the cantons to prevent a complete centralization of forest policy. The differentiated division of forestry competences among the federation, the cantons and the communes, which in its basic features still exists today, was completed already at the beginning of the 20th century.

The main responsibilities of each of the three levels are the following:

- Federation: Quantitative preservation of forest area and forest protection (qualitative preservation of forests)
- Cantons: Forestry planning and implementation of federal and cantonal legislation
- Communes: Forest management and local surveillance

In the course of the 20th century, the federation continually added to its set of instruments, especially concerning the qualitative preservation of forests, primarily by using financial incentives. As a rule, federal financial contributions depended on contributions of the cantons and the forest owners (i.e. mostly the communes) to be made for the same purpose. This mechanism required an intensive cooperation of the federation, the cantons and the communes. Together with these financial incentives, the regulative instruments concerning forest preservation (e.g. the ban on deforestation and clear-cutting) and the detailed prescriptions concerning cantonal and communal forestry organization lead to the development of a considerable institutional capacity on all three levels. The continuous increase of federal financial contributions caused a certain dependence of the cantons and communes on the federation, particularly during the last twenty years. Especially with the introduction of federal contributions to forest management and maintenance, the Swiss forest policy of the 20th century was shaped, on a programme level, more and more by a tendency towards centralism. The implementation of forestry legislation, however, always remained a task of the cantons and of the forest owners.

Several factors external to the field of forestry, like the introduction of New Public Management methods, political demands for deregulation, privatisation and the reduction of hierarchy in governmental structures etc., but most prominently the increasing lack of public means have influenced forest policy during the last years. They have caused the distribution of tasks, between the state and the economy on the one and among the three levels within the federation on the other hand, to be subjected to discussion also in this field. In Switzerland, this discussion is led in the participatory process of the Swiss national forest programme, which is currently under way and in which all important stakeholders, representatives of the cantons and communes among them, are taking part. The discussion results reached so far suggest that political responsibility for forests will be partly re-transferred from the federation to the two lower levels. This does not exclude that the federation retains or even reinforces its commitments to certain partial tasks, like the maintenance of protective forests or the preservation of biodiversity. On the whole, there will probably be a downward transfer of tasks. In any case, it can be expected that the subject of decentralization will become, after about 150 years of a tendency towards centralization, a focal point of the discussion about Swiss forest policy again. It is still uncertain what will be the results of the decisionmaking process within the political institutions (government, parliament, possibly plebiscite) and whether these results will, on the long run, raise or lower the presently high level of sustainability in forest management. This uncertainty also demonstrates that decentralization is not a recipe for guaranteed success in sectoral policies in general or for forest policy in particular. Instead of expecting this, decentralization should be assessed in a differentiated way and always in connection with the natural, political, legal, economic and socio-cultural aspects of a specific situation. Historically grown and functioning federal structures like those that Switzerland disposes of in the field of forest policy are extremely helpful – if not indispensable – for successful decentralization. But they cannot guarantee that decentralized solutions are in any case better than centralistic ones or better than differentiated solutions that combine elements of both centralism and decentralization, as, for example, cooperative federalism does.

... Altdorf long ago had been
Submerged beneath these avalanches' weight,
Did not the forest there above the town
Stand like a bulwark to arrest their fall.

Schiller's William Tell about the protective function
of forests (act III, scene III, translation by T. Martin)

The more I think about your country, the more
convinced I become, that the disparity between
its constituent parts makes it impossible to impose
a common pattern to it: everything points to
federalism.

Napoleon Bonaparte, 1802, to a Swiss delegation
(translation by The Economist, February 14th 2004,
vol. 370, no. 8362, Country Survey Switzerland, p. 6)

Federalism – A Characteristic Element of Swiss Forest Policy

1. Importance of Federalism Generally and in Current Discussion

In a description of the Swiss political system, one of the first features mentioned will be federalism. There is probably no field of Swiss policy that is not influenced by the fact that Switzerland is a federation. It would therefore be impossible to describe Swiss forest policy without referring to federalism. On the other hand, federalism is usually described as being opposed to centralism. This suggests that federalism is some kind of decentralization or non-centralization and is thus closely connected with the subject of this workshop. So there is a double reason, when treating the subject of decentralization in Swiss forest policy, to examine Swiss federalism in connection with this topic.

Both federalism and decentralization are frequent subjects of present discussions concerning the organization of public services and administrative reform. Agenda 21, for example, recommends decentralization specifically in connection with forestry – as a possible tool in combating deforestation and desertification, but also in rural development, protection of water resources and in strengthening the role of farmers.¹ The importance of federalism is demonstrated, for instance, by the fact that more than 40% of the worldwide population live in federal states.² In Europe, federalism is discussed in connection with the future constitution of the European Union, but also in several countries in transition, i.e. Eastern European states that are in the process of reforming their political system.³ In Switzerland, the system of financial compensation between the federation and the cantons is being reformed, which implies a discussion of Swiss federalism.

When speaking about federalism, it is important to keep in mind that this term is used with varying meanings, as there are many possible forms of federalism. It can only be explained precisely within a specific historical, political and socio-cultural context. This paper aspires to do this by exploring the relation between federalism and Swiss forest policy. For this purpose, the theoretical bases of federalism are described briefly (chapter 2), with a special focus on the Swiss form of cooperative federalism (chapter 3). The forest policy practised in Switzerland is discussed as an example of applied cooperative federalism; an overview of its development shows that different degrees of centralization/decentralization are possible within this framework and what reasons can lead to a tendency in the one or other direction (chapter 4). On this basis, a number of ideas and concepts that might be interesting for other countries are suggested and, on the other hand, the structural principle of cooperative federalism is examined critically.

2. Federalism as a General Structural Principle of Political Systems

2.1 Conceptual Framework and Basic Features

2.1.1 Definition and Basic Features

The term "federalism" (from Latin *foedus*, meaning "pact" or "covenant") is used to describe legal and political structures that distribute power territorially within a state. It "requires the existence of two distinct levels of government, neither of which is legally or politically subordinate to each other. Its central feature is therefore the notion of shared sovereignty".⁴ Examples of federations are - to mention only a few - the United States, Switzerland, Germany, Belgium, Canada, Australia, India, Nigeria and Malaysia.⁵

The term "federalism" is used to describe legal and political structures that distribute power territorially within a state.

Federalism differs from devolution, which is defined as the transfer of power from central government to subordinate regional institutions that have, however, no share in sovereignty.⁶ The term "devolution" has been used, for example, for decentralization efforts in Great Britain since the 1970ties.⁷

Although there are many types of federalism, certain basic features are common to all, or nearly all federal systems:⁸

- *Powers on two levels:* "[B]oth central government (the federal level) and regional government (the state level) possess a range of powers which the other cannot encroach upon; these include a measure of legislative and executive authority and the capacity to raise revenue and thus enjoy a degree of fiscal independence."⁹
- *Constitutional competences:* "[T]he responsibilities and powers of each level of government are defined in a codified or written constitution, meaning that the relationship between the centre and the periphery is conducted within a formal legal framework that neither level can alter unilaterally."
- *Supreme Court as arbiter:* "[T]he formal provisions of the constitution are interpreted by a supreme court, which thereby arbitrates in the case of disputes between the federal and state levels of government."
- *Institutional links:* "[L]inking institutions foster cooperation and understanding between federal and state levels of government, giving the regions and provinces a voice in the processes of central policy-making." For this purpose, federations usually have a bicameral legislature. In one of the chambers, the number of representatives (of a member state) depends on the size of the population, this chamber being thus the representation of the citizens of the federation (as the U.S.-American House of Representatives or the Swiss National Council). To the second chamber, each member state can send the same number of representatives, so in this chamber the member states as such are represented (as in the U.S.-American Senate and in the Swiss Council of States; Federal Constitution, art. 149, para. 1 and 4, art. 150).¹⁰

The decisive point of this description of federalism, for the discussion in this paper, is that in a federation, there is not just one "state". There are two levels of statehood, and on one of them, there are several units. This necessitates, on the one hand, a division of competences

between the federation and its constituent units (cf. chapter 3.2). On the other hand, just because both the federation and its members each have some autonomy, they must find ways of cooperating (cf. chapter 3.5). Each of the features mentioned relates to one of these three aspects. The description of Swiss federalism given below explains how Switzerland deals with the questions of the division of competences and of cooperation; the development of Swiss forest policy (chapter 4) shows how they have been answered in this field. The types of federalism to be described below all refer in some way to the relation between the federation and its constituent units.

2.1.2 Types of Federalism

A great number of types of federalism are discussed in political theory; they are distinguished by different criteria (the terminology used is not always consistent). Only a few examples can be mentioned here.

"Dualistic" federal systems are distinguished from "cooperative" ones, meaning that in the former, the federation has its own institutions for performing each state function, while in the latter, it partly relies, especially for implementation tasks, on member state institutions. The Swiss federation, after being rather dualistic in earlier stages of its history, is strongly cooperative today.¹¹ The term "cooperative federalism", however, is used with a more comprehensive meaning (signifying cooperation in many respects, not just the one mentioned here), which will be described in more detail below in chapter 3.5, using Switzerland as an example.

The term "executive federalism" focuses on one aspect of cooperation between federations and their member states. It is used for systems or policy fields, where the general policy is made by the federation, and the member states are responsible for its implementation.¹²

The terms "vertical federalism" and "horizontal federalism" do not refer so much to different kinds of federalism but indicate a focus on different aspects of the same federalist system, that is: on the mutual respecting of rights, the relationship and cooperation of federation and member states ("vertical") on the one hand and of the member states among each other ("horizontal") on the other.¹³

2.1.3 Federalism and Decentralization

Whether federalism is seen as a form of decentralization depends on the definition of the latter term. The expression "de-centralization" implies that a process of centralization took place one time and is now reversed, at least to a certain degree. For federations formed by the coming together of pre-existent states (not by a division of one central state into federal sub-units), the term "non-centralization" is preferred in this connection, because - at least in theory - such a basic centralization, that would have to be reversed, never took place there.¹⁴

If decentralization is understood to be "the expansion of local autonomy through the transfer of powers and responsibilities away from national bodies"¹⁵, the transfer of powers from a federation to its member states or the transformation of a unitary state into a federation¹⁶ is certainly to be seen as a form of decentralization. But decentralization in this sense is also possible in unitary states, if competences are transferred from the central government to subordinate units that do not possess the quality of member states as the constituent units of federations do.¹⁷

The description of the Swiss political system and of the development of Swiss forest policy given below will show that it can both be argued that the Swiss federation is still basically non-centralised - because of the still very important role that the cantons play within the political system - and also that a considerable centralization took place during the 20th century - because the centre (the federation) was given many new competences (e.g. in the field of forest policy).

2.2 Purpose, Advantages and Disadvantages of Federalism

2.2.1 Aims and Basic Tension

What federalism is meant to do can be summarized in the statement that federal systems "give regional and local interests a constitutionally guaranteed political voice".¹⁸ Positive effects expected from such systems are:

- *Diffusion of government power* by a division of powers (in the case of federations, a "vertical" division of powers between the two levels of government is added to the "horizontal" one between legislative, executive and judicial powers) and a system of checks and balances, which helps to protect individual liberties.¹⁹
- *Protection of minorities* by granting them a degree of (territorially organized) autonomy that enables them, among other things, to preserve their cultural identity.²⁰
- *Integration of heterogeneous societies*, as different (e.g. ethnic) groups can accept common federal policies concerning, for example, economic or military matters more easily, if by member state policies concerning, for example, schools or languages, their group-specific needs are met. This is expected to reduce incentives for secession and thus to help holding together heterogeneous nations.
- *Effective fulfilment of public tasks*, as they can be attributed to the kind of unit most appropriate for them. According to the subsidiarity principle, only those tasks that really require centralized regulation are left to the federation, the others will be fulfilled by the member states.²¹ Thus, decentralization becomes possible and problems can be solved more "closely to the people" and their needs and wishes.

Already this enumeration of aims aspired to by the creation of federalist systems shows that federalism necessarily creates a tension between conflicting forces. The two levels of government are supposed to be separate, but there is a necessity of cooperation and compensation; diversity is to be preserved, yet the nation must be held together and there is the question whether, at least in some fields, a similarity of life conditions should not be aimed at (cf. chapter 3.5).²²

Beside decentralization, the purpose of federalism that is probably discussed most and deemed to be the most important one is the protection of minorities - the adaptation of a political system to the fact that the composition of its population is multicultural.²³

2.2.2 Criticism and Conclusion Concerning Federalism in General

As one of its purposes is seen in keeping political systems decentralized, federalism is criticized for not having been able to prevent the centralization that has taken place, in federal states as well as in others, during the twentieth century.²⁴ Nonetheless, Swiss experience shows that federalism can create strong obstacles for centralization and so

reduce the tendency towards it, even if it cannot prevent it altogether.²⁵ It is also possible to argue that centralization is not in every case a bad thing, that many problems states were confronted with during the twentieth century needed centralized solutions,²⁶ which are not necessarily in conflict with federalism, as long as the subsidiarity principle (the attributing of functions to the lowest level possible)²⁷ is respected. And finally, federal systems are equipped with the structures and instruments necessary to reduce centralization again as soon as the developments in a certain field render this possible and desirable (cf. chapter 4.5 below).

Besides the reproach that it does not in every case achieve the ends expected from it, there is also more basic criticism. The most serious point is that federalism can be in conflict with democratic principles, like the principle of "one man, one vote" and the principle of equality in general, just because of the fact that it gives rights to minorities that do not depend on their voting power.²⁸ But these principles should not be seen too absolutely; they are not the only sources of democratic legitimacy. By increasing the opportunities for participation, federalism enhances the legitimacy of a political system.²⁹ Therefore, rather than rejecting federalism for democratic reasons, a careful balance of federalist and democratic principles should be aspired to.³⁰

Federalism has also been said to slow down political processes³¹ and it has been suspected of delaying or even preventing innovation,³² because in federalist systems, new solutions need to be negotiated and agreed upon by more actors than in centralistic ones. But studies of actual political developments in federalist systems demonstrate that it depends on additional factors (e.g. the existence of functioning - formal or informal - negotiation mechanisms) whether federalism hinders or even furthers innovation (e.g. because member states or communes can serve as "innovation laboratories").³³

Keeping in mind what has been said both in favour and in disfavour of federalism, it is still not possible to decide whether "federalism as such" is a good thing, because there are many possible forms of federalist systems, and even about these, it should rather be asked whether they are well adapted to the needs of the nations that use them than whether they are better than others in an abstract sense. What can be said is that, looking at the practical experience of federalist states, the positive aspects seem to prevail. The challenge is, not only for the citizens and politicians of newly formed federations, but also for those of long-existing ones, to make constant efforts to ensure that the possible positive aspects of federalism can realize themselves while the possible negative aspects are avoided.³⁴

3. The Swiss Form of Cooperative Federalism

3.1 Origin of the Federation

As mentioned above, Switzerland is regarded as a typical example of a federation. The description of its political system can illustrate many of the aspects of federalism that were described in the second chapter. The Swiss federation consists of 23 cantons, of which three are divided into so called half-cantons (art. 1 Federal Constitution of 1999) and which differ strongly in size, form of landscape, population size, urban or rural character, economic strength, language (majority: German, minorities of different size: French, Italian and Rhaeto-Rumantsch) and culture. Differences of religious denominations (catholics and protestants) and of – often corresponding – political orientation (conservatives and radicals) are less important today, but played an important role in history.³⁵

The Cantons of Switzerland

- 1 Zürich
- 2 Bern
- 3 Luzern
- 4 Uri
- 5 Schwyz
- 6 Obwalden*
- 7 Nidwalden*
- 8 Glarus
- 9 Zug
- 10 Freiburg
- 11 Solothurn
- 12 Basel-Stadt*
- 13 Basel-Landschaft*
- 14 Schaffhausen
- 15 Appenzell Ausserrhoden*
- 16 Appenzell Innerrhoden*
- 17 St. Gallen
- 18 Graubünden
- 19 Aargau
- 20 Thurgau
- 21 Tessin
- 22 Waadt
- 23 Wallis
- 24 Neuenburg
- 25 Genf
- 26 Jura



The federation developed in a bottom-up process: Independent states coming together formed a loose confederation. In 1848, the confederation was transformed into a federation and the member states, now becoming cantons, yielded part of their sovereignty to it. Additional cantons were formed out of former subject territories and other territories associated in some way with the former confederation. A group of mostly rural, catholic member states were forced by a short war in 1847 to accept the transformation of the confederation into a federation and the loss of sovereignty and independence this meant for them.³⁶ As they were mostly small in respect to population size, they were a minority within the newly formed state and feared that the democratic majority principle, if applied on the level of the federation, was going to subject them completely to the majority formed by the population of the other, partly urban and protestant cantons. They were apprehensive that majority rule would force on them politics, ideas and ways of life that they objected to, and would cause them to lose their identity as communities. To render the federation and majority rule more acceptable for them, strong federalist institutions were necessary, participatory rights for the cantons as such as well as for the citizens. So the cantons were granted certain rights that did not depend of the size of their population.³⁷ Federalism was

- and is - seen by these cantons, but also by the non-German-speaking parts of the population, also minorities, as a means to protect their cultural identity.³⁸

3.2 Bicameral Parliament, Plebiscites and Cantonal Competences

The two most important institutions of this kind are the bicameral parliament of the federation and the double majority requirement in certain plebiscites. To the National Council (Nationalrat), the first of the two parliament chambers, each canton sends a number of representatives according to the size of its population, this chamber representing the people. But to the Council of States (Ständerat), the other chamber, each canton sends two representatives (half-cantons send one each). Every bill has to be approved by both chambers, which renders it quite difficult to get anything accepted against the will of a coalition of the small rural cantons (Federal Constitution, art. 148-150 and 156).

Amendments to the constitution (and some other decisions) can only be adopted by plebiscites. And here again, the decision voted upon will not pass by a majority of votes alone, a majority of cantons approving is necessary as well (Federal Constitution, art. 140 and 142). These federalist rules of decisionmaking, as well in parliament as by plebiscite, give to the vote of a citizen living in a small canton a weight so much greater than to the vote of a citizen living in a large canton, that this has been criticized as undemocratic, as it is in conflict with the democratic "one man, one vote"-principle.³⁹

Because many parliamentary decisions are subject to approval by plebiscites ("direct democracy"), the discussion of bills in parliament is prepared by an extensive consultation of groups that are interested in the matter (Federal Constitution, art. 147), in order to make sure that the consensus found in parliament is acceptable for them and they will not mobilize voters against it. The cantons are always among the institutions consulted, but there are usually a large number of non-governmental institutions, especially associations, among them as well.

Public tasks are supposed to be in the competence of the cantons, unless they are, by constitutional amendment, explicitly assigned to the federation (Federal Constitution, art. 3). As for such amendments the above-mentioned double majority is necessary, cantons have a good chance of preventing such centralization, if they want to. Therefore, it is more appropriate to call the Swiss federal system a non-centralized than a decentralized one.⁴⁰ There is not only a vertical division of powers between the federation and the cantons, but - at least in principle - the system even favours cantonal rather than federal competences. Even if a public task is assigned to the federation, this can be done in different degrees. The federation can be given a framework competence, a concurrent competence, or an exclusive federal competence, meaning that in the first case it can adopt framework legislation that then has to be concretized by cantonal legislation. In the second case, it can legislate in a quite detailed way, if it chooses to, but in all domains within this competence that are not (yet) covered by federal legislation, cantonal legislation remains possible. Only in the third case, none but federal legislation is possible concerning a specific public task.⁴¹

Art. 3 Federal Constitution: Cantons

The Cantons are sovereign insofar as their sovereignty is not limited by the Federal Constitution; they shall exercise all rights which are not transferred to the Confederation.

These institutions are examples for the typical features of federalism mentioned in chapter 2.1.1: There are powers on two levels, constitutional distribution of competences, and institutional links between the levels. The description of these institutions also shows that the vertical division of powers helps to reserve certain fields of legislation exclusively for the cantons, that the cantons have a strong voice in federal legislation and decisionmaking and that even in fields where the federation has competences and legislates, there is usually cantonal legislation as well. This means that Swiss cooperative federalism, although it comprises executive federalism (the implementation of federal laws by the cantons), is by no means restricted to this. Cooperation also includes legislative delegation.

3.3 The Third Level: the Communes

In theory, a two-level structure is sufficient for a political system to be considered federalist (cf. chapter 2.1.1). But the Swiss federation does not consist just of the two levels already mentioned, the federation and the cantons; there is a third level: the communes.⁴² The Federal Constitution guarantees the communes' autonomy, saying also that the definition of its limits is an object of cantonal legislation (Federal Constitution, art. 50, para. 1). The communes or municipalities - villages, towns and cities - have, just as well as the cantons, a long tradition of local government, of a certain degree of self-administration, which includes the right to raise their own taxes.⁴³ On each of the three levels - federation, cantons and communes - legislative, executive and judicial bodies exist and functions are exercised.⁴⁴ This way, the vertical division of powers that is typical for federalism is fully realized. On the other hand, intensive cooperation is necessary between all three levels and between different actors on the same levels, as most of the problems they have to deal with concern more than one of the three levels and require solutions to which actors on all levels need to contribute. All three levels are important for forest policy and competences concerning forestry were, in the course of history, gradually transferred from the communes to the cantons and then to the federation.

3.4 Horizontal Federalism

The description given so far illustrates the vertical dimension of Swiss federalism. But there is also a horizontal dimension to it. Both cantons and communes need to resolve local or regional conflicts among each other, to cooperate in many respects and to coordinate activities that take place on the, for example, cantonal level, but can be carried out by one canton on behalf of several of them (as, e.g., the construction of facilities for waste disposal or educational institutions like universities). There are a number of cooperative bodies. Mainly for the purpose of policy formulation there are (on the cantonal level) the national conference of cantonal executives and four regional conferences of cantonal executives,⁴⁵ and (on the communal level) the Union of Swiss Cities, the Union of Swiss Communes and about fifteen regional urban platforms. For the purpose of coordination and cooperation in policy implementation, there are about 500 conferences of civil servants of different fields and policy specific conferences of cantonal directors (e.g. the Conference of Chiefs of Cantonal Forest Services and the Conference of the Cantonal Forest Directors). The cooperative bodies usually have no effective powers. Nonetheless, they are important for the diffusion of information and ideas, coordination of activities and for the forming of political coalitions concerning specific questions.⁴⁶

The primary coordinating instruments between different cantons are inter-cantonal treaties (Konkordate). On the communal level, purpose-oriented inter-communal cooperation exists in many different forms (legal entities, associations established under private or under public law, cooperatives, joint-stock companies and public- or private-law foundations).⁴⁷

3.5 Cooperative Federalism

The Swiss cantons have a comparatively independent status within the federation. They can, for example, impose their own income taxes and decide on the rates.⁴⁸ An important aim of the Swiss federation is to allow the cantons to preserve a diversity of life conditions, rather than aiming at equal life conditions everywhere (although the federation aspires to set a common standard for public services like schools and public transport)⁴⁹. This is illustrated also by the fact that the cantons have all competences that are not explicitly assigned to the federation (art. 3 Federal Constitution of 1999). But it is exactly this relative independence, the fact that the cantons are, in many respects, not taking orders from the federation, which necessitates intensive cooperation instead. An entire section of the Federal Constitution of 1999 is dedicated to this subject (art. 44-49). Article 46 states that the cantons implement federal law. This executive federalism is an important aspect of Swiss cooperative federalism.⁵⁰

The implementation of federal law by the cantons has its advantages, because this way, local institutions can be used and the federation does not need to create institutions of its own. The authorities involved are "close to the people" and to the specific conditions under which the provisions of the law need to be implemented.⁵¹ But this solution also has its limits. The implementation of the same federal law in different cantons can vary considerably, which violates the principle of equality.⁵²

A sophisticated system of financial compensation takes account of the fact that some regions, especially the mountainous and the rural ones, are at a disadvantage in economic competition because of the natural circumstances, and of the fact that some cantons or communes carry out tasks for others, for example by running a university open to students from other cantons. There is both horizontal (i.e. between bodies on the same level, e.g. between "rich" and "poor" cantons) and vertical (i.e. between a superior and a subordinate body, e.g. provided by the federation to the cantons) compensation. Thus, regional solidarity becomes more important than competition.⁵³ For some time now, a reform of this system (neuer Finanzausgleich, NFA) has been under way. It is expected to disentangle federal and cantonal task fulfilment and financing, to reduce unwanted centralization and to ease the federation's burden of financial responsibilities.⁵⁴

3.6 Summarizing Assessment of Swiss Federalism

In summary, it may be said that Switzerland's history illustrates the ability of federalism to help protecting minorities, preserve cultural diversity and hold together a multicultural society. Its special institutions and its division of competences give the cantons considerable weight in Swiss politics – even more than the constituent units have in some other federations – and strong instruments to prevent centralization. The existence of not just two but three federalist levels enhances the vertical division of powers, the non-centralized nature of its structures and the opportunities for participation. Public tasks can be attributed to the

level that is best suited for their fulfilment. The horizontal federalist structures, on the other hand, help to prevent isolated policymaking by the single units, lack of coordination and unnecessary doubling of activities. They further cooperation among the units of the same level and enable them to learn from each other's experiences. But the feature of Swiss federalism that is most characteristic for many fields of Swiss policy is the fact that - in spite of the principle of division of competences according to policy fields - the federation and the canton cooperate in the fulfilment of public tasks: cooperative federalism.

4. Federalism in Swiss Forest Policy

Seen from a bio-geographical point of view, Switzerland consists of the Jura Mountains, a part of the Central Alps, the Plateau between these mountains that is limited by the Lake of Constance in northeast and the Lake of Geneva in the southwest and a small territory south of the Alps (the Ticino and the South Grisons). As a fifth region, the Pre-Alps that lie between the Plateau and the Alps are to be mentioned. The diversity of landscapes in a comparatively small territory is very great, which means that there are also very different growing conditions for trees and methods of silviculture,⁵⁵ as well as general cultural differences (cf. chapter 3.1). In an analysis of Swiss forest policy, all these diversities have to be taken into consideration.

4.1. Early Centralism: Forests as a Resource

4.1.1 Usage Rights and Regulation by Communes

The forestry situation in 1848, when the Swiss Federation was founded, can only be explained on the basis of earlier processes, which are exposed here briefly. Circumstances were different from region to region, but the general development was about the following. During the Middle Ages and until the 18th century, the modern concept of "property" (meaning the combination of all rights concerning usage and disposition in the hands of one proprietor) did not exist, as far as forests were concerned. Instead, there was a concept of "usage rights". This meant that different persons, communities and institutions were entitled to the different rights concerning the ways in which forests could be used.⁵⁶

The forests were used in many different ways. Wood was used as fuel and timber. Leaves were important as animal fodder, as litter in stables and then, mixed with dung, as fertilizers. The forests were used for grazing (not only for cows but also for goats), forest products like mushrooms and berries for nutrition.⁵⁷ The usage right concept implied that, for example, a rather small group of persons could be entitled to cut down trees in a specific forest, while a larger, but still limited group could have the right to let their animals graze in the forest, to cut off branches for fodder or to gather fallen wood.⁵⁸

There was usually a quite clear definition of the groups of persons entitled to cut down trees for fuel and as timber. This right could be tied to farms or to families. It could also be owned by communities like villages, towns (e.g. capitals of cantons like Bern) or monasteries or by certain authorities. The other usage rights, especially the right to cut off branches for fodder, to gather fallen wood for fuel and grazing rights often were open to lower classes, but still not to everyone, they could be reserved, for example, for the inhabitants of a specific commune. Many of the poorer people depended strongly on these petty rights, especially as their animals often were excluded from or had only very limited access to pasture on meadows.⁵⁹

In this time, forestry questions were mostly regulated by communes.⁶⁰ The most important instrument of such regulation were "Bannbriefe" ("banning letters"), orders which prohibited or limited certain or all uses in specific areas of forest ("Bannwald", "banned forest").⁶¹ Their purpose could be the preservation of forests with a protective function (the importance of forests for the protection of lives and property from hazards like avalanches was recognized early in Switzerland),⁶² but also the safeguarding of wood needs of the community

or of the usage rights of a privileged group.⁶³ When wood became a scarce good, however, cantonal authorities began to intervene more strongly in forest policy.

4.1.2 Early Centralizing Tendencies Due to Wood Scarcity

In the 18th century, population growth and the fuel needs of proto-industrialization caused a scarcity of wood that was felt especially in towns and cities. Although there had always been certain attempts of communal and cantonal authorities to protect forests and secure wood supply, for example by prohibiting wood to be sold outside of the local community, such efforts were now intensified and were made more often by cantonal authorities, as the canton capitals – like Bern – felt the scarcity very acutely.⁶⁴

The wood needs of the cities and of industries (that were often furthered by the authorities) in some cases endangered the wood supply of rural regions.⁶⁵ Especially in connection with forests where both the cantonal authorities and rural communes had or claimed usage rights, conflicts increased.⁶⁶ The city of Bern, for example, suddenly re-activated usage rights that had not been claimed for centuries, and had cut down a large quantity of trees in the Bernese Oberland (that part of the Pre-Alps that is part of the Canton of Bern) to use them for iron mines in the region of Oberhasli and as firewood for the city.⁶⁷ Authorities tried to improve wood production by better protection of forests, mostly by the reassertion and codification of existing (but often un-enforced) restrictions, like the prohibition of grazing in areas where young trees were growing, the rule that forest users entitled to tree cutting were allowed to do so only for their own needs, not for selling, or the stricter controlling who was really entitled to receive wood donations for the poor.⁶⁸ Illegal tree-cutting or other forbidden activities were threatened with increasingly sharp penalties.⁶⁹ The combination of additional restrictions on the usage rights of the rural population and rather relentless application of urban/governmental usage rights caused much anger and distrust that became obstacles difficult to overcome when authorities tried to initialize more sustainable forestry practices in the 19th century.⁷⁰ The insisting of cantonal officials on cantonal forest usage rights can also be interpreted as an attempt to enhance the power of the state (in this case: the canton) at the cost of communal autonomy.⁷¹ These developments foreshadowed a qualitative change in the attitude of cantonal authorities towards forestry regulation: from merely focusing on cantonal/urban usage rights to claiming responsibility for forestry in general.⁷² They were the beginning of the first step of centralization in forest policy, of the cantons' taking over this competence from the communes.

4.1.3 Property Rights and Liberalization

From the 1830ties onwards, efforts were made to resolve the conflict between the central authorities of the cantons and the local communities concerning forest usage rights, like the one mentioned above between the city of Bern and the Bernese Oberland communes. The rights were divided up between the central authorities (representing the cantons) and the local communities (communes).⁷³ But in the same process, the quality of these rights was changed as well. Usage rights were replaced by ownership – by property rights, as the liberal economic theory of the time demanded. This meant that there could be only one owner of a specific forest area. It could be a collective one – for example the citizens of a commune – but it had to be a single, legally defined group. The decisive point was that the

property right of this owner included all rights both of usage and of disposition. These rights could not be divided among several persons or groups any more.⁷⁴ And the new owners were freer in what they could do with their forest - free to clear-cut it, for example. This liberal forest policy was meant to give forest owners a free hand in the management of their forest, in the hope this would motivate them to use the most productive methods, and would thus promote sustainable production of timber.⁷⁵

This reform can be seen as a kind of decentralization, because the communal and private forest owners now had full ownership of those forests that had been assigned to them. Concerning these forests, the cantons did not claim usage or property rights any more. This kind of decentralization, however, did not prevent the centralization of legislative responsibility the beginning of which has been described above.

The reform of property rights had unexpected consequences. The groups that profited from this "reconstitution of forest ownership" were often very limited. Some advocates of the reform had proposed that, when forests were divided up, everyone who had formerly taken part in using the forests, not just people with documented usage rights, but also those with only factual, traditional rights, should be allowed to participate in the negotiations and in some way get their share.⁷⁶ But what actually happened was that in many cases property rights were only given to those individuals or groups that had the best documented usage rights, usually the most important rights like that to cut down trees, the rights that had been tied to the ownership of certain farms, or to families. This meant that the people formerly entitled to "petty" rights like grazing rights or wood gathering lost those and did not get anything instead. Forest ownership went to those already privileged.⁷⁷ This phenomenon is known today as "elite capture": When attempts are made to enhance participation at the local level, "it is still very hard [...] to prevent existing local elites from capturing control of the new institutional power opportunities".⁷⁸ The economic and social consequences for the excluded groups were often grave, as especially poorer people had depended strongly on forest resources (cf. chapter 4.1.1).⁷⁹

A second unexpected consequence of the reform was the fact that the new forest owners often did not use their forests as wisely as they had been expected to. Instead, many of them used their new rights for reckless clear-cutting, without consideration for possible side effects or the preservation of resources, as wood prices were still high (because of a strong demand for timber in all of Europe) and the clear-cutting brought high short term profits.⁸⁰

4.1.4 Cantonal Forestry Laws

Several floods that happened in 1834, 1837 and 1839 in different parts of Switzerland contributed to raising consciousness about the harmful consequences of thoughtless clear-cutting and about the function of the forest as a protection against floods, mudslides and avalanches. The Swiss Forestry Society, an association of forestry experts, also played an important role in bringing public attention to forestry problems. Several cantons now passed forestry laws; in others, proposed laws were rejected by the voters.⁸¹ The laws concerned, among other things, the organization of the forestry personnel (including the question whether salaries were to be paid by the canton or by the communes), prohibition or restriction of deforestation and of harmful forms of usage (like goat grazing or clear-cutting of torrent banks or steep slopes) and re-afforestation.⁸² But only a minority of cantons

succeeded in organizing their forestry personnel in an effective way and in implementing their laws at least to some degree, most of them lowland cantons. Most of the mountain cantons either failed to pass such laws or to implement them. Especially there, the new practices came into conflict with traditional usage forms and were regarded with distrust. These cantons could afford neither to employ a sufficient number of foresters, nor to train them, as it would have been necessary. The warning of the forest experts that the situation in the mountain regions could not be improved without convincing the population proved true.⁸³ But with this cantonal legislation, the first step of centralization, from the communes to the cantons, was completed.⁸⁴ It was the result of the change of quality of the cantonal regulation of forest policy the beginning of which was mentioned above (chapter 4.1.2), from the focus on the safeguarding of the needs and special rights of the canton, of its authorities and of the capital, to the recognition of responsibility for forest policy in general as a public task. This included an expanded view of forest functions: Although forests were still a very important timber and fuel resource, the public interest in their protective function was now acknowledged as well.

4.2 Development of a Cooperative Federalist Forest Policy with a Tendency towards Centralism

4.2.1 The First Federal Competence Concerning Forests: Restricted to Mountains

When the constitution of 1848 was written, the federation was given as few competences as possible, in order to make it more acceptable for the less willing cantons. A federal competence concerning forests was therefore not taken into consideration. According to the principle governing the distribution of competences, this meant that forest policy lay within the competence of the cantons (or communes). Nonetheless, the federation showed some interest for forestry problems. A school for foresters was created as part of the Federal Institute of Technology founded in 1855.⁸⁵ In 1858, the Federal Council (i.e. the federal government) commissioned two groups of experts to report on the mountain forests and on the torrents. The so called Landolt Report was published in 1862, the Culmann Report in 1864. These reports became the basis of the later federal forest policy.⁸⁶ Great floods in several parts of Switzerland in 1868 that not only destroyed much property, but in which also 50 persons were killed brought attention to the fact that there was still a lot to be done.⁸⁷ When in 1874 a new constitution of the federation was approved by a plebiscite, its article 24 assigned to the federation a - restricted - competence concerning forests:⁸⁸

"The federation has the right of superintendence over hydrological engineering and forestry policies in the high mountains. It will support the correction of torrents and the construction of security structures along their banks as well as the afforestation of their headwater regions and will adopt the regulations necessary for the preservation of these constructions and of the forests already existent."

This competence was limited in three respects:

- *territorially*, as it concerned only the mountain forests (i.e. the alpine and pre-alpine forests, but neither the forests of the Jura mountains nor lowland forests)
- *functionally*, as it was restricted to police functions (i.e. the prevention of harm by prohibitions and controlling rather than the furthering of voluntary activities by incentives)
- *organizationally*, as the federation was given just the superintendence, not the task to organize the whole forestry sector.

This strict limitation was typical for the federalist thinking of the time: the federation was to act only in so far as it was necessary for the protection of lives and property, and it had to use its competence in a subsidiary way.⁸⁹ The federation had to concern itself with forests in their protective function, but to meddle as little as possible with their being used economically.

The fact that the federal competence was restricted to the mountain forests reflects this focusing on the protective function, which was ascribed, at that time, only to those forests.⁹⁰ But this restriction can also be seen as the expression of a certain prejudice of the lowland and urban populations towards that of the mountains. The people in the mountain cantons were seen as backward and too uneducated to understand the necessity of and to apply modern methods of forestry; they were thought to be responsible, by thoughtless clear-cutting, for the floods mentioned above.⁹¹ Among the cantons that belonged wholly or partly to the mountain region to which the federal competence applied were all those (seven) that had opposed the formation of the federation 26 years before, but also eight other cantons (of then 22). As far as population size was concerned, the people in the mountain region were a minority (against which the majority was prejudiced). But the federal system made them part of a majority, as far as the number of cantons was concerned (15 out of 22). They could have stopped the new article 24 of the constitution, when it was discussed in the Council of States. Nonetheless, the creation of the federal competence concerning forests met no substantial opposition by representatives of the mountain cantons in parliament.⁹² It can be assumed that the weight that the federal system gives to the mountain cantons had enabled them to ensure that the contents of article 24 were acceptable or even desirable for them, for example by restricting the federal competence to the absolutely necessary, and by explicitly giving the federation the competence to support constructions and afforestations.⁹³ With the creation of the partial federal competence, the next step in the centralization of forest policy - from the cantons to the federation - was begun.

4.2.2 The First Federal Forestry Law: Financial Contributions and Implementation Success

In accordance with the focus of the federal competence on the protective rather than the economic function of forests, the Federal Forestry Inspectorate that was created in 1874 became part of the Federal Department of Home Affairs, not of the Department of Economic Affairs, where forestry authorities were placed in other European countries.⁹⁴ In 1876, a Law on the Federal Superintendence of Forest Policy in the High Mountains was adopted.⁹⁵ It concentrated mainly on the preservation and restoration of protective forests in the mountains. It applied different legislative instruments, but organizational regulations were dominant. Here, the foundation for a comprehensive executive organization with uniformly trained personnel, which exists to this day, was laid. In addition, the law contained certain prohibitions (e.g. of deforestation and forest grazing) and obligations (e.g. of re-afforestation) and established financial incentives for the cantons (for afforestation) and remunerations (for training courses for foresters).⁹⁶

In the first years of its existence, this law did not seem to have the desired effects. Although it contained relatively few prescriptions, even these were difficult to implement. The main reason for this was the lack of means of the mountain cantons. The contribution of 30-40% to the costs of afforestation projects that the federation offered was not sufficient to stimulate such activities. But even more important was the fact that the mountain cantons

could not afford to "employ the necessary number of sufficiently trained foresters" and to "train the subordinate personnel for forest service by holding forestry courses" (articles 8 and 9 of the law of 1876, see above). This meant that it was not possible to implement prohibitions and obligations either.⁹⁷ The federal parliament realized that this was the weak spot of federal forest policy and took action to solve the problem. A federal resolution of 1892 introduced federal contributions to the salaries of the higher forestry officials employed by the cantons for regions falling under the federal forestry law.⁹⁸ This measure made the fulfilment of the provisions of the federal law both affordable and attractive for the mountain cantons. Their forest services were improved; the yearly afforestation area was more than doubled.⁹⁹

It is to be noted that the forestry officials to the salaries of which the federation contributed remained cantonal officials; they were not replaced by federal ones. The forestry law of 1876 (complemented by the resolution of 1892) was thus an early example of cooperative federalism: A federal law implemented to a good part by cantons that in turn are helped in doing so by the federation.

4.2.3 Expansion of the Federal Competence: a Step towards Centralization

The prospect of receiving federal contributions made being subject to federal forestry law attractive also for lowland cantons. They now demanded that the federal competence concerning forests be expanded to the whole federation. Forestry experts advocated this in the hope that it would lead to an improvement of the lowland cantons' forestry laws (and to the creation of attractive positions for forestry experts). The resistance of the mountain cantons (who were apprehensive that such an expansion was going to diminish their share of federal contributions) was overcome by the fact that some of them also desired a greater uniformity of forestry law. As only parts of the territory of those cantons were mountainous, the federal law was applicable only to some of their forests. They had to deal with two different legal situations of forests within the same canton. So in 1897 the constitutional restriction of the federal competence to high mountain forests was abolished¹⁰⁰ and in consequence, the area of application of the Federal Law on Forestry Police was extended to the whole federation. In 1902, it was revised. Most of its original provisions were retained and new activities entitled to financial contributions were added.¹⁰¹

Another federal act of legislation taking place around this time also concerned forests. The Federal Civil Code of 1907 contains an article that grants to everybody a right of access to pastureland and forests (art. 699). Mentioning explicitly the gathering of "berries, mushrooms and the like" (translation by the authors), this article is a small rest of the old petty usage rights (cf. chapter 4.1.1). But this right of access also kept the forests (including those of private owners!) open for strollers and hikers and for other leisure activities. Without it, the recreational function of forests could not have gained the importance it has today.¹⁰²

The expansion of the federal competence to the whole territory of the federation completed the next step in the centralization of forest policy: The federation took over at least some part of this public task from the cantons.

In the development described so far in chapter 4, a transfer of responsibility for forest policy from the communes to the cantons and then to the federation can be observed. Therefore it has to be concluded that, in the field of forest policy, a certain centralization

took place in the Swiss federation. But the centralization was not as complete as it could have been. Although expanded territorially, the competence assigned to the federation by the constitution still remained restricted in functional and organizational respects (cf. chapter 4.2.1).¹⁰³ In addition, the federal competence still was a framework competence. Federal legislation had to be concretised by the cantons and was implemented by them.¹⁰⁴ The system applied in Swiss forest policy remained one of cooperative federalism, not of centralism.

4.3 Federal Forest Policy in the 20th Century: Cooperation and Centralization

The - at first sight - only territorial expansion of the federal competence changed the character of federal forest policy. It could no longer focus almost exclusively on the protective function of forests, as many lowland forests could not be attributed such functions. Socio-economic aims for federal forest policy were the obvious alternative.¹⁰⁵ It will be shown below that the scope of application of the law of 1902 was expanded gradually in this direction.

The federation, besides preserving protective forests, now also more and more wanted to further an adequate, professional and efficient management of all Swiss forests. Not only the provisions of the Federal Law on Forestry Police, but also the school for foresters founded in 1855 as part of the Federal Institute of Technology and the Swiss Forest Research Institute founded in 1885 served this purpose.¹⁰⁶

The law of 1902 remained the legal basis of federal forest policy until 1991. It underwent a considerable number of partial revisions, most of which concerned the financial mechanisms, but its basic structure remained the same.¹⁰⁷ Its regulation of behaviour and organisation obviously was durable and, both from a regulatory and from a federalist point of view, well balanced.¹⁰⁸ These more stable parts of forest legislation (consisting mainly of the law of 1902 and the ordinance of 1903 based on it, which was totally revised in 1965), will be described first, with special attention to the cooperation between the federation, the cantons and the communes that it instituted. The numerous revisions of those articles of the law that concerned the possible reasons for, and the amount of, federal financial contributions will be treated afterwards, in order to demonstrate that these changes implied a gradual, incremental expansion of the federal competence.

4.3.1 Federal Superintendence and the Cantons as Norm Addressees

As the law of 1902 created the basic structures of the Swiss forestry system that still exists today, its contents are discussed here more broadly, to illustrate the ways of cooperation between different federal levels that are part of this system. The order in which the different subjects are treated follows mostly that of the law.

The law stated the federal superintendence on forest policy (art. 1) and subjected to it all kinds of forests (art. 2).¹⁰⁹ The most important distinction that the law made was that of protective and non-protective forests (art. 3). It charged the cantons to determine which forests were protective ones, but subjected the result of their determination to federal approval, thus leaving the practical process to the cantons and making use of the knowledge of the local situation that their officials had, but enabling the federation to ensure a common standard.

A federal framework competence like the one the federation had concerning forest policy, giving the federation just the right of superintendence, typically necessitates legislative delegation to the cantons. The federal law can give basic directives and sets minimal standards, but cantonal legislation is needed in addition and a certain scope of choice is left to the cantons. Within the law of 1902, norms addressing the cantons concerned, for example, legislation on the duty of re-afforestation (not only of clear-cut areas, but also of areas, where the forests had been destroyed by natural forces like avalanches, storms or fire; art. 32), on the preservation of private protective forests (art. 29) and on complementary cantonal financial contributions that had to be made in order to receive federal ones (in 1902, the law did not contain these prescriptions yet, they were added later, cf. chapter 4.3.5). But most important among the delegation norms of the law of 1902 were those concerning procedure and organization. The federal directives about organizational matters were so detailed that they left only comparatively little legislative scope to the cantons and came close to the limits set for federal framework legislation.¹¹⁰

4.3.2 Organization, Professional Training and Forestry Community

The organizational prescriptions of the law of 1902 have not been changed substantially until today. The federal, cantonal and communal forestry institutions presently existing were mostly created on the basis of this law (or already of that of 1876). The law of 1902 named the Federal Forest Inspectorate that had been created by the law of 1876 as the federal institution to exercise the federal superintendence (art. 5 of the law of 1902; art. 6, para. 2 of the law of 1876). The law of 1902 also regulated the organization of the forest services of the cantons. Its prescriptions concerning the division of the forest areas into districts and smaller units and concerning the higher forestry personnel (e.g. on the professional training requested) were quite precise (art. 6 and 7), there were even some concerning the subordinate personnel (art. 9). In relation to organizational matters, the law left less to the discretion of the cantons than in connection with other questions. This was rendered acceptable to the cantons by the federal contributions to the salaries of the cantonal forest personnel (art. 7, para. 2, art. 10 and 40): He who pays the piper calls the tune. Nonetheless, a certain, even if small, scope for choice was left to the cantons; the forest services remained cantonal institutions, they did not become federal ones. Federal officials had, for example, no immediate authority to give directions to cantonal forest personnel; they had to address the competent cantonal authorities. Concerning the communal foresters (forest rangers), the law did not prescribe compulsively the same training that it demanded for the cantonal ones, but it made it a condition for federal contributions to their salaries (art. 8). This factually ensured that the communes also hired adequately trained foresters. The law also enabled the federation to make direct financial contributions to forestry training courses organized by cantons or private associations (art. 12). Thus the federation could set uniform standards for the professional training of forestry officials (cf. chapter 4.4.2). The federal contributions to the salaries of forestry personnel were abolished in 1953,¹¹¹ but the prescriptions concerning the organization of the cantonal forest services and concerning the quality of training requested remained. All higher forestry officials (the forest engineers), of the federation, of the cantons and of the communes, received their training at the Federal Institute of Technology, most of them were members of the Swiss Forestry Society (chapter 4.1.4), this way they were familiar with the same concepts concerning forestry: all of this created a forestry community within

which communication and cooperation were possible, both between the federal, cantonal and communal levels and within the same level, i.e. among the foresters of different cantons or communes.

4.3.3 The Communes as Norm Addressees

The second basic distinction made by federal forest legislation (in addition to that of protective and non-protective forests) is that of public and private forests, or rather of public and private forest owners. Public forest owners are mostly communes; the importance of this owner group is pointed out by the following numbers: 73% of all Swiss forests (more than 50% in the Plateau and in the Pre-Alps, 70-80% in the Alps and the Jura Mountains) have public owners, 67% are owned by communes.¹¹² The units of the third level of the Swiss federalist system, the communes, are addressed by federal forestry legislation mainly in their quality as forest owners (unlike the cantons that are addressed mainly by legislative delegation).

For the forests of public owners, the law stated a basic duty of planning and management according to cantonal law (art. 18, para. 1), and the general principles to be followed: sustainability, priority of the protective function of the forests and prohibition of clear-cutting in protective forests (art. 18., para. 2 to 5). Additional prescriptions for publicly owned forests were the compulsive discharge of harmful easements (if necessary by expropriation; art. 21) and the prohibition of harmful forms of usage, especially grazing (art. 24). Also in these norms the federal law restricted itself to what needed to be prescribed for the federation as a whole, and left it to the cantons to concretise these rules according to the local circumstances and necessities.

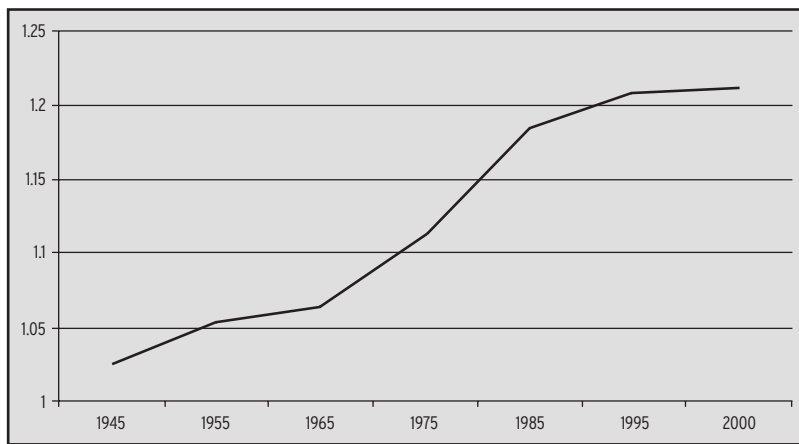
The only prescriptions of the law immediately binding for private forest owners were the prohibition of deforestation (art. 30 and 31), and of clear-cutting in protective forests (art. 27 and art. 18, para. 5; from 1923 onwards, a cantonal permission has been required for clear-cutting in non-protective forests).¹¹³ Otherwise, the regulation of the management of private forests was left to the cantons.¹¹⁴

4.3.4 The Main Objective: Preservation of Forest Area

The central prescription of the law of 1902¹¹⁵ was the one decreeing that the total amount of the existing forest area should not be diminished (art. 31, para. 1). In the course of time, federal legislation came to define how exactly it had to be determined whether a given area was forest or not, and what could be done with these forest areas and what could not.¹¹⁶ In principle, as the constitution (art. 24) required "the preservation ... of the forests already existent", deforestations were prohibited. They were possible with an extraordinary authorization; federal legislation determined the conditions necessary for such authorizations and the cases in which substitute afforestations had to take place. Deforestation authorizations were issued by the Federal Council (the federal government) if they concerned protective forests, by cantonal governments in other cases (art. 31, para. 2 and 3 of the law of 1902, and additional later prescriptions).¹¹⁷ The preservation of forest area was thus regulated comprehensively by federal law, only implementation tasks that left little scope for choices were left to the cantons. In this field, Swiss forest policy was centralized to a high degree.¹¹⁸

The most important among the few changes of forestry legislation made between 1902 and 1991 that did not concern financial contributions concerned the preservation of forest area.¹¹⁹ These changes were made within the ordinance based on the law of 1902, not in the law itself, but judged according to their importance they can be attributed law character.¹²⁰ After its total revision in 1965,¹²¹ the ordinance based on the law of 1902 contained a definition of the terms "forest" (art. 1) and "deforestation" (art. 25), as well as a prescription on the regional preservation of forest area (art. 24 para. 1). In addition, it named the conditions requested for deforestation authorizations (art. 26). The article about regional area preservation meant that the total amount of forest area was not only to be maintained within the Swiss territory as a whole, but within each region, meaning that compensatory afforestation had to be done in the region where the corresponding deforestation had taken place.

Increase
of forest area
since 1945
(in mio. ha)



Source: Swiss Forestry Statistics

A change of the federal law on administrative procedures became important for the preservation of forest areas: in 1969, the Federal Court (i.e. the Swiss supreme court) was made the last instance for decisions on deforestation (instead of the Federal Council, a political, not judicial body). As around this time nature protection organizations were given a right of appeal in issues that concerned their field of activity, the Federal Court was enabled, by its decisions on such cases, to influence strongly the practise both of forest area determination and of authorizing deforestations. After a continuous increase of the total area authorized to be deforested per year in the fifties, this influence helped to reverse the trend and led to a continuous decrease in the seventies of the 20th century.¹²² This is an example for the role that non-governmental organizations play in Swiss forest policy. The way in which deforestation authorizations are handled also illustrates the concept of executive federalism described above (chapter 2.1.2): The federation sets the norms, the cantons implement them and a federal instance - the Federal Court - ensures a uniform practice.

4.3.5 Financial Contributions of the Federation and the Scope of the Federal Competence

During the whole time of existence of the law of 1902, especially after the Second World War, there were many attempts to replace this law that focused on police objectives with a law that would have laid more emphasis on the socio-economic aspects of forestry. Attempts at total revisions that would have led to such a change did not succeed, but the numerous partial revisions, especially those concerning federal financial contributions, showed the same tendency. This resulted in a gradual, incremental introduction of such aspects into the law. The following chronological list mentions the most important partial revisions and other developments illustrating this. There were also a number of reductions of financial contributions (which are not listed); they were often made in connection with general economizing efforts of the federation.¹²³ But when reductions and increases are summed up, there results an increase on the whole.¹²⁴ In order to show that increases were often connected with other events of the time, some of these are listed as well.

1920ties	Efforts for total revision of the law of 1902, aiming at <i>additional contributions for private forests</i> ¹²⁵
1929	Increase of federal contributions to the construction of forest tracks <i>"Coupled contributions"</i> - rule introduced for this category
1940ties	Efforts for total revision of the law of 1902, aiming at <i>replacing the federal forest police law by a federal law on forest economy</i> ¹²⁶
1946	<i>Federal contributions</i> for the consolidation of private forest plots <i>introduced</i>
1947	<i>Article 31^{bis} concerning economic welfare and stability</i> added to Federal constitution, allowing the federation, among other things, to promote the development of forest industry
1951	Unusually many and dangerous avalanches in the Swiss mountains, which endanger mass tourism ¹²⁷ Earlier <i>reductions on federal contributions</i> for afforestations and protective constructions are <i>abolished</i> , as far as regions threatened by avalanches are concerned
1955	<i>Additional possibilities for federal contributions</i> for the training of wood-cutters, the protection of forests (especially against grazing) and for the control of the origin of plants and seeds
1967	Time-limited federal <i>measures for the mitigation of losses of the forest economy</i> due to storm damages
1969	Federal Law on <i>Investment Loans for Forest Economy in the Mountain Regions</i> adopted, federal contributions to the construction of wood tracks and other means of access increased, federal contributions to avalanche protection measures re-introduced
1980ties	General concern about environmental damages, in connection with forests about <i>new kinds of forest damages due to air pollution</i> Falling wood prices, forest maintenance in many cases does not pay for itself any more ¹²⁸
1984	<i>Federal contributions for the abatement of forest damages</i> and the maintenance of damaged forests introduced
1985	<i>Introduction of federal contributions for the promotion of forest maintenance</i> made possible by a wide interpretation of the articles 37 ^{bis} and 42 ^{bis} of the law of 1902

List according to Zimmermann 1989, p. 4-6 (modified, emphasis added, translation by the authors), unless indicated otherwise.

The principle of "coupled contributions" is important for the Swiss system of financial cooperation between the federation and the cantons in general. It means that the federation will only make a contribution for a certain purpose if the canton concerned complements it

with a contribution of its own; the amount requested usually depends on each canton's financial strength. In these cases, federal law usually does not oblige the cantons to contribute financially to activities that the federation deems worthy of support, but, by applying the principle of coupled contributions, it creates an incentive for them to do so. This principle fits well with a spirit of cooperation rather than coercion between the federation and the cantons, but it has been criticized for rewarding spending rather than results¹²⁹.

Federal contributions concerning forests (in mio. CHF)



Source: Swiss Forestry Statistics

By two federal resolutions in 1984 and 1988¹³⁰ the federation for the first time exerted direct influence on forest management. Federal support for forest maintenance became part of the federal forest policy. The reasons for this were the new forest damages caused by air pollution and the fact that non-use of forest, due to low wood prices and high forest maintenance costs, was seen as a danger to regeneration and thus to forest health, especially in protective forests. Federal contributions concerning forests were raised from a total of about 60 million Swiss Francs in 1984 to about 270 million in 1990.¹³¹

The examples listed above illustrate that federal forestry legislation was extended incrementally from police legislation (meaning that a degree of coercion and control are exerted, mainly to prevent harm) to legislation on the promotion of forest economy.¹³² It can be observed that increases of federal contributions were often triggered by natural disasters (avalanches, storms)¹³³ and that - at least before the decline of wood prices in the 1980ties - needs and concerns of urban populations (avalanches threatening roads and railways and thus tourism, air pollution damages threatening forests, among other things, in their recreational function) influenced forestry legislation and created a readiness to assent to the payment of federal contributions. The constitutional competence necessary for this development was given to the federation, not by a change in the article of the constitution concerning forestry (art. 24 Federal Constitution), but by an article inserted

into the constitution in 1947 (article 31^{bis}), concerning the promotion of economic development in general. Federal economic promotion always has to be seen in the context of the fact that some regions of Switzerland, mainly the mountain regions, are economically handicapped by their topography. Transport of cut timber, for example, is far more difficult and costly there than in the lowlands. By giving special support to these regions, the federation aims at creating a level playing field for them, in order to prevent that these disadvantages ruin these regions' ability to compete economically and lead to their depopulation.

4.3.6 Other Constitutional Competences of the Federation Relevant for Forestry

In 1962, 1969 and 1971, the federation was given three additional competences that were relevant for forestry: competences concerning nature and landscape protection (art. 24^{sexies} of the Federal Constitution of 1874), land use planning (art. 22^{quater}) and environmental protection (art. 24^{septies}). Forestry was now seen in the context of comprehensive resource protection and its ecological importance was more and more recognized. These aspects were at first taken into consideration in the implementation of the existing forest legislation and later explicitly mentioned in the new forest law of 1991. By the new constitutional competences of the federation, including the one concerning economic promotion (chapter 4.3.5), its competence concerning forests was also expanded, although the original article 24 of the constitution of 1874 was not changed. This extended federal competence is mirrored in the forest article (art. 77) of the totally revised constitution of 1999, which now mentions the protective, economic and social functions of forests and authorizes the federation to establish protection principles and to encourage conservation measures.

Art. 77 Federal Constitution: Forests

- 1 The Confederation shall ensure that forests may fulfil their protective, economic and social functions.
- 2 It shall establish principles for the protection of forests.
- 3 It shall encourage measures for the conservation of forests.

4.3.7 Summarizing Assessment of the Law of 1902 and Its Development

By way of a summary, it can be said that the federal forest legislation of the 20th century (the law of 1902, the ordinance based on it and additional regulations) was rather centralistic concerning the determination and preservation of forest area, and concerning organizational matters. As far as management and use of the forests were concerned, it had a federalist character. As in other policy fields, economic promotion became more and more important, in addition to the original police purposes of federal forest legislation. A practise-oriented, but also complicated and cumbersome system of financial cooperation between the federation and the cantons developed, serving also the purpose of supporting disadvantaged regions. Forest policy was also integrated into environmental protection policy.

As far as its main objective, the preservation of forest area, is concerned, the Federal Law on Forestry Police of 1902 can be considered a success. The balance found in this law between centralistic and federalist regulations was adapted to the special needs of forestry and seems to have worked to the satisfaction both of the federation and the cantons for almost

ninety years. The principle of "no deforestation without substitute afforestation" even became part of the public consciousness: The Swiss are proud that they take such good care of their forests.

4.3.8 The Forest Law of 1991

Although it was finally the concern about the new forest damages due to air pollution that triggered a total revision of the law of 1902, the economic interests described above (chapter 4.3.5) also strongly influenced it. In 1991, a new forest law was adopted. It entered into force in 1993.¹³⁴ It was based not just on the forestry article of the constitution, as the law of 1902

Art. 1 Federal Forests Law: Purpose

1 The purpose of the present law is:

- a. to ensure conservation of the forests in their present extent and geographical distribution;
- b. to protect the forests as a natural environment;
- c. to ensure that the forests are able to fulfil their several functions, in particular their protective, social and economic functions (forest functions);
- d. to safeguard and develop forestry and forest-related industries.

2 Another purpose of the law is to help protect the population, and property of great value, from avalanches, landslides, erosion and rockfall (natural catastrophes).

had been, but also on the articles concerning nature and landscape protection, environmental protection and promotion of economy. Accordingly, the scope of objectives of the law is quite large. It includes the preservation of the forest area, the protection of the forest ecosystem and the furthering of the "protective, social and economic functions" of forests and forest management (art. 1). In short, the integration of the aspect of nature and landscape protection of forestry and of its economic and social aspects that had developed before is now made fully explicit in the law;¹³⁵ the multi-functionality of forests is recognized. The law's wider field of application is also reflected by the fact that it is not called "Federal Forest Police Law" any more, like the law of 1902, but just and simply "Federal Forest Law". The policy instruments mentioned in this law are mainly those that had been developed before. Procedure regulations have become more important (e.g. determination of forest area and right of appeal for nature protection organizations, coordination with land use planning, reservation of federal approval, and information duties of the cantons to the federation). New instruments introduced by the law of 1991 are the obligations for the cantons to levy a deforestation compensation charge (art. 9) and to ensure participation of the population in forestry planning (art. 18 of the ordinance based on the law of 1991)¹³⁶. The description of the present situation of Swiss forest policy in the following chapter mainly relates to the law of 1991 and gives additional examples of its prescriptions.

4.4 Federalist Elements in Present Swiss Forest Policy

A comprehensive listing of institutions, regulations and procedures relevant for forestry in Switzerland would contain, of course, also institutions that are exclusively federal or exclusively cantonal (or communal), regulations that only concern one of the three levels

of the federation and procedures involving authorities on just one of these levels. But this chapter will focus on institutions, regulations and procedures that connect two of these levels with each other. There are, for example, institutions created specifically for the cooperation of two of the federal levels. Certain regulations oblige two of them to work together in some form. Some procedures involve authorities of more than one level. All of these are typical for Swiss forest policy with its strong involvement of all three levels of government. They can also serve as illustrative examples for the description of Swiss cooperative federalism given above.

4.4.1 Federalist Institutions

Among the federal legislative bodies, it is the Council of States that provides, as it does for other policy fields, a forum where a dialogue between federal and cantonal interests in forest policy can take place. Three members of this council represented their cantons (but also the federal parliament), for example, in the participatory process in which the Swiss National Forest Programme ("Waldprogramm" WAP; cf. chapter 4.5) was worked out. An institution for the horizontal coordination of executive bodies is the Conference of the Cantonal Forest Directors (the heads of the cantonal governmental departments comprising the forest service). There is no formally established institution that brings together members of federal and cantonal executives, but regular meetings of the Federal Counsellor (i.e. member of the federal government) who is responsible for the Department for Environment, Transport, Energy and Communications (DETEC) with the Conference of the Cantonal Forest Directors fulfil this need. Such meetings also took place at the beginning and at the end of the WAP process. Within the Swiss Forest Agency (which is part of the Swiss Agency for the Environment, Forests and Landscape SAEFL which in turn is part of the above mentioned DETEC) – the federal institution that is in charge of the implementation of federal forest legislation –, there are four forest district area coordinators, each of them responsible for a number of cantons. These coordinators also serve as a link between the federation and the cantons. The two managing directors of the Forest Agency regularly meet with the Conference of Chiefs of Cantonal Forest Services. These vertical channels of communication are very important for the functioning of the implementation of federal legislation by the cantons. Besides, they ensure that the federation and the cantons know each others needs, wishes and plans concerning forestry matters and can take them into consideration in an appropriate way. The organization of the communication between the cantonal and communal level differs from canton to canton; the most important connection consists in those communal executives that are also members of the cantonal legislative. Specifically in the field of forestry, the two levels are linked by the cantonal district foresters and the mostly communal range foresters.

4.4.2 Federalist Contents

The Federal Forest Law that is currently in force contains a number of prescriptions concerning the cooperation between the federation and the cantons. The federation issues regulations for the prevention and the repair of damages to forests and on measures against diseases and parasites, but in setting up a plant protection service, it collaborates with the cantons and other interested parties (Federal Forest Law, art. 26). The federation, the cantons and interested groups work together in the training of forestry personnel (Federal Forest Law, art. 29 f.; Forest Ordinance, art. 32 ff.). Although the cantons hire their own forestry

personnel, only persons having a federal eligibility certificate can become heads of cantonal forest districts or acquire other high level positions in a forest service (Federal Forest Law, art. 29 para. 3; Ordinance on Forests, art. 36). The commission that issues these certificates is presided over by a representative of the Swiss Forest Agency (Regulation on the Practical Training of Forestry Engineers, art. 9, para. 2). Both the federation and the cantons inform authorities and the population on forestry matters (Federal Forest Law, art. 34). Here, coordination is necessary to avoid contradictions and unnecessary doubling of information activities. The articles 35 ff. of the Federal Forest Law regulate the federal financing activities. Financial contributions can be paid to forest owners, cantons, communes and organizations performing forestry-related tasks (cf. also art. 32). The federation only contributes to the costs of a project or activity if the canton in question does so as well (Federal Forest Law, art. 35, para. 2, lit. a). This system of joint financing in general, as well as the fact that cantons can also be recipients of the federal financial support, implies collaboration between the two levels. When the federal and the cantonal budgets for financial incentives for forest owners are made, there is an intensive informal cooperation between the director of the Swiss Forest Agency and the chiefs of the cantonal forest services, to coordinate their activities so that they will complement each other as efficiently as possible. When the federation grants loans for forestry investments, it leaves the necessary investigations into the individual case to the canton of the requester, but reserves the right to decide on the loan (art. 40, para. 3).

4.4.3 Federalist Procedures

Both in the field of legislation and in that of implementation, there are forestry-specific procedures in which the federation and the cantons work together. As far as federal legislation on forestry is concerned, the procedures of consultation described above (cf. chapter 3.2) and the possibility of hearings held by parliamentary commissions are the same as for legislation on other subjects.

Certain legislative acts of the cantons concerning forestry, on the other hand, are specifically required by the federal forest law to be approved by the federation before they can enter into force (Federal Forest Law, art. 52): cantonal regulations on activities that are potentially harmful for forests (Federal Forest Law, art. 16), the cantonal determination of the minimal distance between buildings and the edge of the forest (art. 17) and cantonal planning and management regulations concerning forests (art. 20, para. 2). Other cantonal dispositions for the implementation of federal forestry law do not need the approval of the federation, but must be communicated regularly to it (art. 53).

The implementation of forest law also requires some procedures involving both levels. In connection with the preservation of forest area, the authorization needed for deforestations still plays an important role. It is issued either by cantonal or by federal authorities; this depends no longer, as it used to, on the size of the area to be deforested, but on the main decision to which the deforestation authorization is connected. If this decision (e.g. on the construction of a railroad or of a motorway) is made by federal authorities, they also authorize the deforestation, if the main decision (e.g. on the construction of a building) is made by cantonal authorities, they also decide on the deforestation (Federal Forest Law, art. 6, para. 1). In some of the latter cases, the cantonal authorities have to consult the competent federal agency (the Swiss Agency for the Environment, Forests and Landscape,

SAEFL), before they make their decision (art. 6, para. 2). Such a consultation is also required in certain environmental assessment procedures that can be relevant for forests, too (Federal Law on Environmental Protection, art. 9, para. 7). On the other hand, whenever federal authorities, based on other federal law or on an international treaty, issue an order in application of the Federal Forest Law, they have to consult the canton concerned beforehand (Federal Forest Law, art. 49, para. 2).

Generally, the Swiss Agency for the Environment, Forests and Landscape has a right of appeal against orders issued by cantonal authorities in applying the Federal Forest Law and ordinances or regulations based on it (Federal Forest Law, art. 46, para. 2). On the other hand, cantons, communes and NGOs like nature and landscape protection organizations under certain conditions also have a right of appeal against orders based on this law (art. 46, para. 3; cf. chapter 4.3.4).

Forests owned by communes cannot be sold unless the canton authorizes this (Federal Forest Law, art. 25, para. 1). So this is a procedure where the cantonal and the communal levels are involved.

In connection with criticism of the federal policy of subsidization based on the Federal Forest Law, a pilot programme called Efor2, for experimenting with new financing instruments and rules, was conducted from 1997 to 2001. The measures tested were intended to be impact- (rather than cost-) oriented and in better accordance with the principle of subsidiarity and the benefits principle (the latter meaning that limited financial means should be invested where they produce the greatest possible benefits). An additional aim was to enhance the effectiveness and efficiency of federal and cantonal funding by delegating more tasks and responsibilities to the cantons. Instruments used were service agreements concluded between the federal and cantonal governments, global and blanket subsidies. The experiences gained will be drawn on during the revision of the Federal Forest Law that is currently under way.¹³⁷

4.5 Federalist Elements in the Swiss National Forest Programme (WAP)

The Swiss National Forest Programme ("Waldprogramm" WAP) is a national forest programme (NFP), an instrument that was recommended by Agenda 21¹³⁸ and other international documents and bodies.¹³⁹ The WAP is the framework in which the federal forest administration, together with the Swiss forestry stakeholders, has prepared the revision of the Federal Forest Law mentioned above. It is a participatory - i.e. rather addressee- than expert-oriented - process with the purpose of improving federal forest policy and its implementation. Aspects of the WAP process and contents that are interesting from the point of view of federalism will be discussed in this chapter.

Although the international recommendations had a certain influence, the reasons to initiate the WAP in Switzerland were primarily national ones. Problems connected with the economic viability of Swiss forest enterprises created an urgent need for reform. Studies concerning Swiss forest policy made concrete suggestions for improvement.¹⁴⁰ There were discussions about how to apply the principles of the new public management philosophy to forest policy and about changes necessary in connection with the reform of the system of financial compensation (Neuer Finanzausgleich, NFA, cf. chapter 3.5). All of this necessitated an in-depth-review of Swiss forest policy with participation of all stakeholders, to determine the

future policy course in this field. The concrete proposal to create a national forest programme was made by the federal authorities. The preparation of a revision of forest legislation was listed in the plan for federal legislative activities in the years 1999-2003. The Swiss Forest Agency proposed a number of subjects to be discussed and the Department for Environment, Transport, Energy and Communications (DETEC) started a consultation process. The reaction of the cantons was a rather reserved one, but the federal authorities proceeded nonetheless with initializing the WAP (by instructing the Swiss Agency for the Environment, Forests and Landscape SAEFL to plan and carry out such a process), although taking into account criticism expressed during the consultation process.¹⁴¹ The start of the programme was thus quite centralistic, but a representative of the cantons was involved in the process from the beginning. During the process, the cantons were - among the different participative bodies of the WAP - represented in the so called forum and in the working groups (by cantonal forestry officials, members of cantonal governments and by three members of the Council of States), but not in the project management of the WAP.¹⁴² These cantonal representatives had not only to safeguard the interests of their own cantons, but also those of cantons as such, of this level within the federalist forest policy.

Based on the resolutions adopted by the Ministerial Conference on the Protection of Forests in Europe (MCPFE) in Helsinki (1993) and Lisbon (1998), the six focal points of discussion were:¹⁴³

- forest area and distribution
- protection of forests
- protective function of forests
- biodiversity of flora and fauna
- enhancement of wood usage
- socio-economic functions of forests

But in the course of the discussions, it became clear that one of the crucial issues was the question about the future distribution of tasks between the state (government) and forest economy. For which aspects does the government want to keep a certain responsibility (connected with the possibility to regulate, but also with the obligation to contribute financially to the implementation of such regulations), which aspects will be left to private forestry economy, by giving it (at least to a certain degree) a free hand where these aspects are concerned? Giving more responsibility to the private actors would mean that the density of regulations concerning forestry would have to be reduced. The comprehensive prohibition of clear-cutting, for example, would be abolished. Forest owners should be able to choose this method of harvesting, in limited areas, in places where it can cause no harm. The number of activities for which authorisations are requested (e.g. forest planning) could be reduced. In a federalist system, a redistribution of responsibilities between the state and private actors is unavoidably connected with a second question. Which of the remaining public responsibilities should be assigned to the cantons, which to the federation? The proposed answer arrived at in the WAP process is that some competences should go back to the cantons. The federation will keep its responsibility for the protective function of forests and for biodiversity, and will restrict its financial contributions, at least in principle, to activities concerning these aspects. Biodiversity and the protection provided by forests are public goods that can be safeguarded appropriately only by the federation.¹⁴⁴ Forestry

planning and economic use of forests, on the other hand, can be left to the cantons; in these fields their role should be strengthened in order to make forest management less complicated and bureaucratic for the owners.¹⁴⁵ This distribution of tasks, however, was stated only in principle by the discussion partners in the WAP process; they were not entirely consequent in their conclusions. There are additional fields where the future role of the federation is not quite clear yet, such as:¹⁴⁶

- the training of forestry personnel
- promotion of the wood production and processing chain, structural promotion in general
- forest health
- minimal ecological standards for forestry

It seems to be certain that the federation will not withdraw entirely from these fields, but the degree of its future participation still remains to be discussed and determined. In this process of negotiation, the cantons are only one group of stakeholders. The discussion will continue within the framework of the revision of the forest law.

The return of competences to the cantons will also launch discussion and decision processes in the cantons. They have to decide what they will do with their new responsibilities, freedoms and burdens. Until now, federal financial contributions usually are so called "coupled contributions", which means that the federation only makes them if the canton concerned complements them with a contribution of its own (cf. chapter 4.3.5). It is not clear yet what will happen to such cantonal contributions if the federation withdraws its part from all those that do not concern protective forests or biodiversity. The cantons can decide to take over the part formerly paid by the federation (and thus accept to shoulder a heavier burden themselves), if they do not, communes can decide to do so, but it is also possible that neither does and that this part of the financial incentives existing today will fall away entirely. This can lead to situations in cantonal forest policy that are completely different from the present ones. The future role of the cantons in the fields where the federation will probably retain a partial responsibility will depend on the degree of responsibility the federation will leave them. The cantons' scope for choice in forestry matters will be influenced more and more by other sectoral policies (e.g. agricultural policy) and by cross-sectoral approaches (e.g. regional policy or nature and landscape protection policy). In spite of these changes and influences, however, it can be expected that in general the responsibilities of the cantons in the field of forestry will be expanded.

5. Conclusions and Outlook

In summary, it can be said that in Switzerland, a discussion of forest policy has always been also a discussion about federalism. Federalism with its basic requirement of a division of competences between the central government and the regions within a state, federalism with its aim to prevent abuse of power, to respect regional differences and the interests of minorities and to integrate them, federalism in its cooperative form that is typical for Switzerland has been and is the main structuring influence on Swiss forest policy. Swiss forest policy has all important characteristics of cooperative federalism:

- A distribution of competences basically defined by the constitution
- Selective (within a policy field) centralization of certain important issues - like forest protection and professional training of forestry personnel
- Decentralized regulation of other issues (within the same policy field) - like forest management and forest service
- Strong cooperation between the federation and the cantons both in policy formulation and in implementation

It is not surprising, therefore, that Swiss forest policy also illustrates the strengths of cooperative federalism, like its ability to adapt in a differentiated way to practical needs and circumstances, and its weaknesses, like a certain tendency towards complicated, not very transparent systems or towards incremental centralization.

This incremental centralization can be observed in the form of the federation's taking on additional financial responsibilities, but it is shown also by the fact that the density of regulation in the field of forestry continuously increased, both in qualitative and in quantitative respects. Federal forest policy, originally focusing on (the protective function of) mountain forests, now takes into account the multi-functionality of all Swiss forests; the organizational apparatus connected to it has been extended; the number of procedural requirements (especially with respect to deforestations) has increased.

In spite of all this, forest policy in Switzerland has not ended up entirely centralized, because there are corrective factors. At the level of the constitution, centralization is limited by the fact that the federal competence concerning forests is still only a framework competence. In consequence, there is not only federal, but also cantonal legislation on forestry matters; the economic use of forests is still basically the cantons' (or even the communes') business and the cantons have built up and retained a great institutional capacity in the whole field of forestry. This partial centralization, limited by corrective factors, is again typical for cooperative federalism.

After a long period of incremental centralization, which was intensified during the last decade, the pendulum now begins to swing into the other direction: First steps towards decentralization can be observed. An important reason for this is the difficult financial situation of the federation: As in other policy fields, it just cannot afford to spend as much on forestry any more as it did until now. Money - influencing behaviour by financial means - has always been important in the development of Swiss forest policy. This is illustrated by many examples, from the first forestry-related federal contributions in the 19th century to the federal contributions to forest maintenance in the 1980ties. Financial mechanisms -

that is, the need of the federation to reduce its expenditures - are now promoting decentralization and have given new relevance to the discussion of federalism. Other factors with a similar effect are the political demands of neo-liberalism for market-oriented solutions (New Public Management, privatization etc.), globalization and the decreasing importance of environmental and social issues on the political agenda.

This new tendency towards decentralization has manifested itself in several processes. The cross-sectoral policy of the NFA (reform of the system of financial compensation) has launched a new discussion about the relation between the state and civil society or "the market", on the one hand, and on the appropriate federalist level to which specific public tasks should be assigned, on the other hand. The pilot-programme Effor2 tested new, decentralization-oriented instruments and provided first experiences. The rather addressee- than expert-oriented participatory process of the National Forest Programme WAP resulted in suggestions for a decentralizing redistribution of forestry-related competences.

From this decentralization process, a reduction of the federation's exerting influence by financial means can be expected. It will be accompanied (as a compensation) by a decentralization with respect to regulative, procedural and organizational instruments. This means that the forest policy system might be completely restructurized: On the institutional level, cantons and communes would then have to take on far more responsibilities, concerning both forest protection and management. Among other things, this would open opportunities for more participation and thus for a more addressee-oriented forest-policy. The stronger financial responsibility of the decentralized units will probably lead to a more efficient and output-oriented use of financial means in forestry matters. Higher efficiency can be one of the results of this process.

But for a good forest policy it is not enough to be efficient, it has also to fulfil social and ecological requirements, if it is intended to be sustainable in a comprehensive way. Concerning sustainability, Switzerland is - at least in the near future - not free to choose whether it wants to take this principle into consideration in its policies or not. Both by international agreements and by the national constitution it has committed itself to adjust its forest policy to the sustainability principle. This means that Swiss forest policy must aim, even in economically difficult situations, at a sustainable forest management in the comprehensive sense of the Helsinki and Lisbon resolutions, which encompass ecological, economic and social aspects of forest management.

Federal states like Switzerland are, in principle, free to assign the accomplishment of such duties either to the federation or to its constituent units (cantons or communes) or to involve more than one level in it. But as these commitments are international and constitutional ones, it is the federation that bears the final responsibility for their fulfilment. Nonetheless, there are many different ways in which this can be done. It has often been demonstrated that historical developments - political structures evolving over a long period of time, formed by long-term experience - play an important role in achieving a "good policy" or "good governance". In Switzerland, the history of many public policies has been characterized for a long time by cooperative federalism. A forest policy aiming at "good governance for a sustainable forest management" cannot neglect this structural principle of cooperative federalism. A decision for an extreme - either for an entirely centralized or for a completely decentralized forest policy - would be contrary to this history and is therefore highly improbable. The challenge will be to find the right balance between the

two poles - the one that is right for the present moment, as the process of balancing the tendencies towards centralization and towards decentralization, whether in forest policy or elsewhere, is never completed or comes to an end. A permanent adaptation to changing circumstances remains necessary.

With the experiences from the pilot-programme Effor2, the conceptual framework and the (until now intermediate) results of the WAP-process, the constitutional and international commitments and the mechanisms of cooperative federalism, Switzerland disposes of excellent bases for reformulating a forest policy which is obliged to the principle of sustainability on the one and to the tradition of federalism on the other hand. The process to be expected, during which all political institutions and actors (the federal government, parliament and administration, the cantons, the stakeholder organizations and, in case of a plebiscite, the voters) will have to confront the new problems and the suggestions for their solution, is only just beginning. At the moment we do not know in which form of federalism in forest policy this process will result and whether it will lead to a more or to a less sustainable forest management in Switzerland.

With regard to federalism, the observation of the development of Swiss forest policy leads to the conclusion that it is not good or bad per se, but that its value depends on the political, socio-economic, cultural and even natural context. What can be certainly said in its favour is that it offers the both stable and flexible structures and procedures through which a political system can become either more centralized or more decentralized, according to its present needs, and through which the permanently necessary adaptation to changing circumstances can take place.

The description of the development of Swiss forest policy given in this paper is not meant to be an invitation to follow its example. It is intended to give some impressions how a combination of different degrees of centralization and decentralization, a selective (de)centralization of specific part-competences could work in the field of forest policy and what kind of institutional framework might be useful for this.

Bibliography

Battaglini Monica, Giraud Olivier (2003): Policy Styles and the Swiss Executive Federalism: Comparing Diverging Styles of Cantonal Implementation of the Federal Law of Unemployment. In: Schweizer Föderalismus in vergleichender Perspektive/Le fédéralisme Suisse dans une perspective comparée/Swiss Federalism in Comparative Perspective, special issue of the Swiss Political Science Review, Zürich, vol. 9, issue 1, p. 285-308.

Benz Arthur (2003): Föderalismus und Demokratie. Eine Untersuchung zum Zusammenwirken zweier Verfassungsprinzipien, Polis Nr. 57 / 2003.

Bisang Kurt, Zimmermann Willi (2003): Minimum Requirements for Sustainable Use of Forests in National Forest Programmes. Elements and Principles Developed for a Study of Swiss Forest Policy. In: Sustainable Development, vol. 11, p. 36-46.

Bisang Kurt, Zimmermann Willi (2002): Nationale Forstprogramme: Internationaler Kontext, erste europäische Erfahrungen und Lehren für die Schweiz. In: Schweizerische Zeitschrift für Forstwesen, vol. 153, issue 11, p. 419 - 429.

Bloetzer Gotthard (1978): Die Oberaufsicht über die Forstpolizei nach schweizerischem Bundesstaatsrecht, Schulthess, Zürich.

Braun Dietmar (2003): Dezentraler und unitarischer Föderalismus. Die Schweiz und Deutschland im Vergleich. In: Schweizer Föderalismus in vergleichender Perspektive/Le fédéralisme Suisse dans une perspective comparée/Swiss Federalism in Comparative Perspective, special issue of the Swiss Political Science Review, Zürich, vol. 9, issue 1, p. 57-89.

Braun Rudolf (1984): Das ausgehende Ancien Régime in der Schweiz, Vandenhoeck & Ruprecht, Göttingen/Zürich.

Crook Richard C. (2002): Subtheme 2.2. Decentralization and Good Governance. In: Abderhalden Ursula, Blindenbacher Raoul (ed.): Federalism in a Changing World - Learning from Each Other. Conference Reader. International Conference on Federalism 2002, St. Gallen, Switzerland, p. 299-332.

Fleiner Thomas, Kälin Walter, Linder Wolf, Saunders Cheryl (2003): Federalism, Decentralization and Conflict Management in Multicultural Societies. In: Politorbis, Eidgenössisches Departement für auswärtige Angelegenheiten, Bern, vol. 32, issue 1, p. 39-57. (Another version of this article, by the same authors and with the same title, can be found in: Federalism in a Changing World - Learning from Each Other. Conference Reader. International Conference on Federalism 2002, St. Gallen, Switzerland, p. 227-259).

Franzen Axel, Zimmermann Willi (ed.) (1999): Gesellschaftliche Ansprüche an den Wald - Meinungsumfrage, Swiss Agency for the Environment, Forests and Landscape (SAEFL), Bern (with English abstract on p. 6).

Freiburghaus Dieter, Buchli Felix (2003): Die Entwicklung des Föderalismus und der Föderalismusdiskussion in der Schweiz von 1874 bis 1964. In: Schweizer Föderalismus in vergleichender Perspektive/Le fédéralisme Suisse dans une perspective comparée/Swiss Federalism in Comparative Perspective, special issue of the Swiss Political Science Review, Zürich, vol. 9, issue 1, p. 29-56.

Griffiths Ann L. (ed.) (2002): Handbook of Federal Countries, McGill-Queen's University Press, Montreal etc.

Häfelin Ulrich, Haller Walter (2001): Schweizerisches Bundesstaatsrecht (5th edition), Schulthess, Zürich.

Häring Barbara, Gsponer Gabriele, Koch Peter (2002): Effort2: Konzeptbericht. Wirkungsorientierte Subventionspolitik im Rahmen des Waldgesetzes. Swiss Agency for the Environment, Forests and Landscape (SAEFL), Bern (with English abstract on p. 5).

Heywood Andrew (2000): Key Concepts in Politics, St. Martin's Press, New York.

Kissling-Näf Ingrid, Zimmermann Willi (1996): Aufgaben- und Instrumentenwandel dargestellt am Beispiel der schweizerischen Forstpolitik. In: Staatsreform/La réforme des institutions/Institutional Reforms, special issue of the Swiss Political Science Review, Zürich, vol. 2, issue 2, p. 47-79.

Koller Heinrich (2003): Der Preis des Föderalismus aus juristischer Sicht. In: Hänni Peter (ed.): Mensch und Staat. Festgabe der Rechtswissenschaftlichen Fakultät der Universität Freiburg für Thomas Fleiner zum 65. Geburtstag, Universitätsverlag Freiburg Schweiz, Freiburg.

Kübler Daniel, Schenkel Walter, Leresche Jean-Philippe (2003): Bright lights, big cities? Metropolisation, intergovernmental relations, and the new Federal urban Policy in Switzerland. In: Schweizer Föderalismus in vergleichender Perspektive/Le fédéralisme Suisse dans une perspective comparée/Swiss Federalism in Comparative Perspective, special issue of the Swiss Political Science Review, Zürich, vol. 9, issue 1, p. 261-282.

Küchli Christian, Stuber Martin (2000): Forest Development in the Swiss Alps: Exchanging Experience with Mountain Regions in the South (CD-ROM). Swiss Agency for Development and Cooperation (SDC), Bern (page numbers quoted according to the text file-version on the CD-ROM, from the file "Complementary stories and flashes").

Lane Jan-Erik (2001): Introduction: Switzerland - Key Institutions and Behavioural Outcomes. In: Lane Jan-Erik (ed.): The Swiss Labyrinth. Institutions, Outcomes and Redesign, Frank Cass, London/Portland (Or.), p. 1-18.

Linder Wolf (1998): Swiss Democracy. Possible Solutions to Conflict in Multicultural Societies, Macmillan etc., Basingstoke etc.

Linder Wolf, Vatter Adrian (2001): Institutions and Outcomes of Swiss Federalism: The Role of the Cantons in Swiss Federalism. In: Lane Jan-Erik (ed.): The Swiss Labyrinth. Institutions, Outcomes and Redesign, Frank Cass, London/Portland (Or.), p. 95-122.

Marquardt Berndt (2003): Umwelt und Recht in Europa. Von den grossen Rodungen im Hochmittelalter bis ins 21. Jahrhundert, Schulthess, Zürich.

von Miaskowski August (1878): Die Verfassung der Land-, Alpen- und Forstwirtschaft der deutschen Schweiz in ihrer geschichtlichen Entwicklung vom 13. Jahrhundert bis zur Gegenwart, Verlag von H. Georg, Basel.

Nohlen Dieter, Schultze Rainer-Olaf, Schüttemeyer Suzanne S. (ed.) (1998): Lexikon der Politik. Band 7: Politische Begriffe, C. H. Beck, München.

Papadopoulos Yannis (2001): How does Direct Democracy Matter? The Impact of Referendum Votes on Politics and Policy Making. In: Lane Jan-Erik (ed.): The Swiss Labyrinth. Institutions, Outcomes and Redesign, Frank Cass, London/Portland (Or.), p. 35-58.

Price Martin F. (1990): Mountain forests as common-property resources. Professur Forstpolitik und Forstökonomie ETH-Zürich, Forstwissenschaftliche Beiträge Nr. 9, Zürich.

Rey Heinz (2003): Art. 699. In: Zivilgesetzbuch (vol. 2). Basler Kommentar zum Schweizerischen Privatrecht, Helbing & Lichtenhahn, Basel, p. 1182-1185.

Rudolf Walter (1987): Federal States. In: Bernhardt Rudolf et al. (ed.) (1995): Encyclopedia of Public International Law, North Holland Publishing Company/Elsevier, Amsterdam etc., vol. 2, p. 362-375.

Schärer Werner, Jacobi Claudia, Limacher Sandra, Manser Rolf (2004): Waldprogramm Schweiz (WAP-CH). Handlungsprogramm 2004-2015, Swiss Agency for the Environment, Forests and Landscape (SAEFL), Bern.

Schmithüsen Franz, Zimmermann Willi (1999): Switzerland. In: Pelkonen Paavo et al. (ed.): Forestry in Changing Societies in Europe. Information for Teaching Module. Study Book Part II: Country Reports, University Press, University of Joensuu, Joensuu (Finland), p. 415-441.

Schuler Anton (2000): Skript zur Wald- und Forstgeschichte, Professur für Forsteinrichtung und Waldwachstum, Departement Forstwissenschaften, Eidgenössische Technische Hochschule (ETH) Zürich, Zürich.

Schuler Anton (1998): Der auf das Gebirge beschränkte Geltungsbereich des Eidgenössischen Forstpolizeigesetzes von 1876: Eine Frage von Zentralismus und Regionalismus? In: Forstlicher Zentralismus und forstlicher Regionalismus. Forsthistorische Fachtagung 7. - 9. Oktober 1998, Tharandt, p. 82-87.

Stuber Martin (1997): "Wir halten eine fette Mahlzeit, denn mit dem Ei verzehren wir die Henne." Konzepte nachhaltiger Waldnutzung im Kanton Bern 1750-1880, Beiheft Nr. 82 zur Schweizerischen Zeitschrift für Forstwesen, Zürich.

Vatter Adrian (1999): Föderalismus. In: Klöti Ulrich et al.: Handbuch der Schweizer Politik, NZZ-Verlag, Bern, p. 77-108.

Vatter Adrian, Wälti Sonja (2003): Schweizer Föderalismus in vergleichender Perspektive - Der Umgang mit Reformhindernissen. In: Schweizer Föderalismus in vergleichender Perspektive/Le fédéralisme Suisse dans une perspective comparée/Swiss Federalism in Comparative Perspective, special issue of the Swiss Political Science Review, Zürich, vol. 9, issue 1, p. 1-25.

Watts Ronald L. (2003): La pertinence de l'idée fédérale dans le monde contemporain. In: Politorbis, Eidgenössisches Departement für auswärtige Angelegenheiten, Bern, vol. 32, issue 1, p. 14-17.

Watts Ronald, Blindenbacher Raoul (2002): Federalism in a Changing World - Learning from Each Other. A Conceptual Framework for the International Conference on Federalism 2002. In: Abderhalden Ursula, Blindenbacher Raoul (ed.): Federalism in a Changing World - Learning from Each Other. Conference Reader. International Conference on Federalism 2002, St. Gallen, Switzerland, p. 15-45.

Wullschleger Erwin (1981): Forstliche Erlasse der Obrigkeit im ehemals bernischen Unteraargau, Swiss Federal Institute of Forestry Research (Report no. 234), Birmensdorf.

Zimmermann Willi (1989): Auf dem Weg zu einem neuen schweizerischen Waldgesetz. Arbeitsbericht des Fachbereichs Nr. 89/8, Institut für Wald- und Holzforschung, Fachbereich Forstökonomie und Forstpolitik, Eidgenössische Technische Hochschule (ETH) Zürich, Zürich.

Zimmermann Willi (1984): Aufgabenteilung zwischen Bund und Kantonen auf dem Gebiete des Forstwesens in der Schweiz, Institut für Wald- und Holzforschung, Fachbereich Forstökonomie und Forstpolitik, Eidgenössische Technische Hochschule (ETH) Zürich, Zürich.

Laws and Official Publications

Botschaft Waldgesetz (1988): Botschaft zu einem Bundesgesetz über Walderhaltung und Schutz vor Naturereignissen (Waldgesetz, WaG) vom 29. Juni 1988, Bundesblatt/Federal Journal 1988, vol. 3, p. 173.

Bundesbeschluss NFA (2003): Bundesbeschluss zur Neugestaltung des Finanzausgleichs und der Aufgabenteilung zwischen Bund und Kantonen (NFA) vom 3. Oktober 2003, Bundesblatt/Federal Journal, p. 6591-6598.

Federal Civil Code (1907): Schweizerisches Zivilgesetzbuch vom 10. Dezember 1907/Federal Civil Code of December 10, 1907, Systematische Rechtssammlung/Systematic Collection of Federal Laws No. 210.

Federal Constitution (1999): Verfassung der Schweizerischen Eidgenossenschaft vom 18. April 1999/Federal Constitution of the Swiss Confederation of April 18, 1999, Systematische Rechtssammlung/Systematic Collection of Federal Laws No. 101, Amtliche Sammlung/Official Collection of Federal Laws 1999 p. 2556. English version: www.admin.ch/ch/itl/rs/1/c101ENG.pdf

Federal Forest Law (1991): Bundesgesetz über den Wald vom 4. Oktober 1991/Federal Forest Law of October 4, 1991, Systematische Rechtssammlung/Systematic Collection of Federal Laws No. 921.0, Amtliche Sammlung/Official Collection of Federal Laws 1992 p. 2521.

Federal Forest Ordinance (1992): Verordnung über den Wald vom 30. November 1992/Federal Forest Ordinance of November 30, 1992, Systematische Rechtssammlung/Systematic Collection of Federal Laws No. 921.01, Amtliche Sammlung/Official Collection of Federal Laws 1992 p. 2538.

Federal Law on Environmental Protection (1983): Bundesgesetz über den Umweltschutz vom 7. Oktober 1983/Federal Law on Environmental Protection of October 7, 1983, Systematische Rechtssammlung/Systematic Collection of Federal Laws No. 814.01, Amtliche Sammlung/Official Collection of Federal Laws 1984 p. 1122.

Federal Law on Forestry Police (1902): Bundesgesetz betreffend die eidg. Oberaufsicht über die Forstpolizei vom 11. Oktober 1902/Federal Law on Forestry Police of October 11, 1902, Amtliche Sammlung/Official Collection of Federal Laws, vol. 2, p. 353-361.

Regulation on the Practical Training of Forestry Engineers (1994): Reglement über die praktisch-forstliche Ausbildung der Forstingenieurinnen und Forstingenieure vom 2. August 1994, Systematische Rechtssammlung/Systematic Collection of Federal Laws No. 921.211.1, Amtliche Sammlung/Official Collection of Federal Laws 1994 p. 2085.

Vernehmlassungsvorlage NFA (1999): Der Neue Finanzausgleich zwischen Bund und Kantonen. Schlussbericht der vom Eidg. Finanzdepartement (EFD) und der Konferenz der Kantonsregierungen gemeinsam getragenen Projektorganisation.

Endnotes

- ¹ Agenda 21, paragraphs 11.1, 11.3 a, 12.28 a, 12.57 a, 14.17, 14.18 d, 18.12 i, 32.4 and 32.5 a
- ² Watts, p. 14; Fleiner et al., p. 39; cf. also Watts/Blindenbacher, p. 21 ff.
- ³ Cf. Neue Zürcher Zeitung, Jan. 21, 2004, No. 16, p. 5
- ⁴ Heywood, p. 240; emphasis added
- ⁵ Griffiths, p. 342 ff., 314 ff., 147 ff., 58 ff., 105 ff., 30 ff., 161 ff., 220 ff. and 178 ff.
- ⁶ Heywood, p. 240 and 238. Nohlen et al., p. 188, do not assign sovereignty to the member states of federations.
- ⁷ Nohlen et al., p. 121
- ⁸ All following quotations from Heywood, p. 241; cf. also Watts/Blindenbacher, p. 24 f.
- ⁹ Cf. also Nohlen et al., p. 186
- ¹⁰ Griffiths, p. 318 and 346
- ¹¹ Vatter/Wälti, p. 12; Linder/Vatter, p. 103; Lane, p. 8; Linder, p. 54 f.
- ¹² E.g. Battaglini/Giraud, p. 286
- ¹³ Häfelin/Haller, p. 351 and 353
- ¹⁴ Linder, p. 40 ff.; cf. Watts/Blindenbacher, p. 26
- ¹⁵ Heywood, p. 237
- ¹⁶ Cf. Rudolf, p. 363
- ¹⁷ Rudolf, p. 364
- ¹⁸ Heywood, p. 242
- ¹⁹ Cf. Fleiner et al., p. 39 f.
- ²⁰ Fleiner et al., p. 48; Linder, p. 18 ff.
- ²¹ Heywood, p. 258 f.
- ²² Nohlen et al., p. 187; Heywood, p. 291 f.; cf. Vatter/Wälti p. 9 f.
- ²³ Fleiner et al., passim
- ²⁴ Heywood, p. 242
- ²⁵ Linder, p. 43; Freiburghaus/Buchli, p. 37 f., 43 and 45
- ²⁶ Freiburghaus/Buchli, p. 46
- ²⁷ Linder, p. 56
- ²⁸ Cf. Benz, p. 9 ff.
- ²⁹ Benz, p. 11
- ³⁰ Benz, p. 10 and 27 ff.
- ³¹ The Economist, vol. 370, no. 8362, issue of February 14, 2004, country survey of Switzerland, p. 18; Koller, p. 109 and 111 ff.
- ³² Heywood, p. 242; Vatter/Wälti, p. 9; Linder, p. 56 f.
- ³³ Linder, p. 52 and 58 f.; Vatter/Wälti, p. 10 ff. and 20 f.
- ³⁴ Watts/Blindenbacher, p. 28 f.; Benz, p. 27; Koller, passim
- ³⁵ Linder, p. 6 f. and 16 ff.; Schmithüsen/Zimmermann, p. 416
- ³⁶ Linder, p. 5 ff.
- ³⁷ Linder, p. 16 ff.
- ³⁸ Linder, p. 18 ff.
- ³⁹ Cf. Linder, p. 44 ff. and 48 f.
- ⁴⁰ Linder, p. 40 ff.
- ⁴¹ Häfelin/Haller, p. 308 ff.

- ⁴² Linder, p. 40
- ⁴³ Linder p. 49 ff.
- ⁴⁴ Linder, p. 40 and 53
- ⁴⁵ Kübler et al., p. 270; Vatter, p. 98 f.
- ⁴⁶ Häfelin/Haller, p. 351 f.; Kübler et al., p. 270 f.; Vatter, p. 98 f.
- ⁴⁷ Häfelin/Haller, p. 351 f.; Kübler et al., p. 270 f.
- ⁴⁸ Braun 2003, p. 62
- ⁴⁹ Vatter/Wälti, p. 10; Linder, p. 60 f.
- ⁵⁰ Cf. Linder/Vatter, p. 103 f.
- ⁵¹ Linder, p. 54 ff.
- ⁵² Linder, p. 68 f.
- ⁵³ Linder, p. 61 ff.; cf. Lane, p. 8
- ⁵⁴ Cf. Bundesbeschluss NFA; Vernehmlassungsvorlage NFA, p. 18
- ⁵⁵ Schmithüsen/Zimmermann, p. 415 ff.
- ⁵⁶ Marquardt, p. 68, 78 and 248; Schuler 2000, p. 64; cf. Stuber, p. 42
- ⁵⁷ Küchli/Stuber, p. 2 f. and 5 f.; Stuber, p. 149 ff.; Braun 1984, p. 97 f.
- ⁵⁸ Stuber, p. 42; Schuler 2000, p. 108
- ⁵⁹ Küchli/Stuber, p. 4 f., Schuler 2000, p. 64 ff., Marquardt, p. 76 ff.; Miaskowski, p. 79.
Miaskowski's description, written in 1878, gives a contemporary point of view.
- ⁶⁰ Price, p. 66 ff.
- ⁶¹ Price, p. 66 f.
- ⁶² Price, p. 66
- ⁶³ Schuler 2000, p. 67 and 70 f.
- ⁶⁴ Schuler 2000, p. 72 f.; Stuber, p. 46 f. and 48 f.
- ⁶⁵ Price, p. 67 f.; Stuber, p. 43 ff. and 52 f.; Schuler 2000, p. 77
- ⁶⁶ Wullschleger, p. 236 ff.; Schuler 2000, p. 108
- ⁶⁷ Küchli/Stuber, p. 6 f.; Stuber, p. 43 ff.
- ⁶⁸ Wullschleger, p. 388 ff.; Stuber, p. 45
- ⁶⁹ Wullschleger, p. 326 and 396 ff.; Stuber, p. 59 f.
- ⁷⁰ Küchli/Stuber, p. 6 f.
- ⁷¹ Stuber, p. 46 f.
- ⁷² Stuber, p. 48 f.
- ⁷³ Küchli/Stuber, p. 13 f.; Miaskowski, p. 80 f.; Schuler 2000, p. 90 f.
- ⁷⁴ Stuber, p. 136
- ⁷⁵ Küchli/Stuber, p. 12 ff.; Stuber, p. 137
- ⁷⁶ Stuber, p. 139
- ⁷⁷ Küchli/Stuber, p. 13 f.; Stuber, p. 138; Schuler 2000, p. 109
- ⁷⁸ Crook, p. 308 ff. and 314 f.
- ⁷⁹ Braun 1984, p. 97 f.
- ⁸⁰ Küchli/Stuber, p. 13 f. and 18; Schuler 2000, p. 91; Miaskowski, p. 87 f.
- ⁸¹ Küchli/Stuber, p. 20 f., Schuler 2000, p. 91; Bloetzer, p. 5 ff.; Miaskowski, p. 88 f. and 98 ff.
- ⁸² Miaskowski, p. 100 ff.
- ⁸³ Bloetzer, p. 9 f.; Kissling/Zimmermann, p. 57; Miaskowski, p. 99 f. and 106 f.; Schuler 2000, p. 95 ff.
- ⁸⁴ Cf. Price, p. 68
- ⁸⁵ Bloetzer, p. 1 f. and 11 ff.
- ⁸⁶ Kissling/Zimmermann, p. 57; Bloetzer, p. 25; Schuler 2000, p. 98 f.

- ⁸⁷ Kissling/Zimmermann, p. 57; Küchli/Stuber, p. 20; Bloetzer, p. 43
- ⁸⁸ Amtliche Sammlung/Official Collection of Federal Laws, vol. 1, p. 494 f.; translation by the authors
- ⁸⁹ Kissling/Zimmermann, p. 58
- ⁹⁰ Bloetzer, p. 60
- ⁹¹ Schuler 1998, p. 83 f.; cf. Küchli/Stuber, p. 20 f.
- ⁹² Bloetzer, p. 47
- ⁹³ Cf. Bloetzer, p. 44 ff., 47, 55 and 57
- ⁹⁴ Kissling/Zimmermann, p. 58
- ⁹⁵ Federal Law on Forestry Police, Amtliche Sammlung/Official Collection of Federal Laws, vol. 2, p. 353-361
- ⁹⁶ Kissling/Zimmermann, p. 59
- ⁹⁷ Kissling/Zimmermann p. 59; Bloetzer, p. 58 f.
- ⁹⁸ Amtliche Sammlung/Official Collection of Federal Laws, vol. 13, p. 326 f.
- ⁹⁹ Kissling/Zimmermann p. 59; Bloetzer, p. 59
- ¹⁰⁰ Amtliche Sammlung/Official Collection of Federal Laws, vol. 16, p. 339-341
- ¹⁰¹ Amtliche Sammlung/Official Collection of Federal Laws, vol. 16, p. 825 f. and vol. 19, p. 492-506; Kissling/Zimmermann, p. 60; Bloetzer, p. 61 ff.
- ¹⁰² Schmithüsen/Zimmermann, p. 424; Franzen/Zimmermann, p. 45 f.; Rey, margin no. 6 and 13
- ¹⁰³ Kissling/Zimmermann, p. 61 ff.; Zimmermann 1984, p. 5
- ¹⁰⁴ Zimmermann 1984, p. 5
- ¹⁰⁵ Kissling/Zimmermann, p. 60 f.
- ¹⁰⁶ Kissling/Zimmermann, p. 61 f.; Bloetzer, p. 60 ff.
- ¹⁰⁷ Kissling/Zimmermann, p. 61 f.
- ¹⁰⁸ Zimmermann 1989, p. 7 f.
- ¹⁰⁹ Zimmermann 1984, p. 6 f.
- ¹¹⁰ Zimmermann 1984, p. 9 f.
- ¹¹¹ Zimmermann 1989, p. 4; Amtliche Sammlung/Official Collection of Federal Laws, 1954, p. 559
- ¹¹² Schmithüsen/Zimmermann, p. 418 f.
- ¹¹³ Zimmermann 1989, p. 3
- ¹¹⁴ Zimmermann 1984, p. 8 f.
- ¹¹⁵ Zimmermann 1984, p. 7
- ¹¹⁶ Zimmermann 1984, p. 6 f. and p. 10
- ¹¹⁷ Zimmermann 1984, p. 7
- ¹¹⁸ Zimmermann 1984, p. 6 f. and p. 10
- ¹¹⁹ Kissling/Zimmermann, p. 62
- ¹²⁰ Zimmermann 1989, p. 7
- ¹²¹ Amtliche Sammlung/Official Collection of Federal Laws, 1965, p. 861
- ¹²² Kissling/Zimmermann, p. 62 f.; Zimmermann 1989, p. 3
- ¹²³ Zimmermann 1989, p. 4 ff.
- ¹²⁴ Zimmermann 1989, p. 7
- ¹²⁵ Zimmermann 1998, p. 10
- ¹²⁶ Zimmermann 1998, p. 10
- ¹²⁷ Küchli/Stuber, p. 41
- ¹²⁸ Botschaft Waldgesetz, p. 180
- ¹²⁹ E.g. Vernehmlassungsvorlage NFA, p. 16 f.
- ¹³⁰ Amtliche Sammlung/Official Collection of Federal Laws, 1984, p. 517 ff. and 1988, p. 1696

- ¹³¹ Kissling/Zimmermann, p. 63 f.; Botschaft Waldgesetz, p. 180
- ¹³² Kissling/Zimmermann, p. 61 and 64; Zimmermann 1989, p. 3-8 and 13 f.
- ¹³³ Zimmermann 1989, p. 7
- ¹³⁴ Amtliche Sammlung/Official Collection of Federal Laws, 1992, p. 2521 ff.
- ¹³⁵ Kissling/Zimmermann, p. 64
- ¹³⁶ Kissling/Zimmermann, p. 64 f.
- ¹³⁷ Häring et al., p. 5; Schärer et al., p. 7
- ¹³⁸ Agenda 21, para. 11.3 d
- ¹³⁹ E.g. the Intergovernmental Panel on Forests, the Intergovernmental Forum on Forests and the Ministerial Conference on the Protection of Forests in Europe MCPFE; cf. Bisang/Zimmermann, p. 38
- ¹⁴⁰ Bisang/Zimmermann, p. 427
- ¹⁴¹ Schärer et al., p. 79
- ¹⁴² Schärer et al., p. 19, 80 and 82-87
- ¹⁴³ Schärer et al., p. 79
- ¹⁴⁴ Schärer et al., p. 30 ff. and 39 f.
- ¹⁴⁵ Schärer et al., p. 40 and 45
- ¹⁴⁶ Schärer et al., p. 39 and 42 ff.